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**Installation Restoration Site 09,
Former Foundry and Site 10,
Former Bus Painting Shop**

**Record of Decision
Naval Station Treasure Island
Treasure Island, San Francisco, California**

September 2007

Prepared for:

**Base Realignment and Closure
Program Management Office West
San Diego, California**

Prepared under:

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ACRONYMS AND ABBREVIATIONS

AST	Aboveground storage tank
BCT	Base Realignment and Closure Cleanup Team
bgs	Below ground surface
BRAC	Base Realignment and Closure
Cal/EPA	California Environmental Protection Agency
CCSF	City and County of San Francisco
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
COEC	Chemical of ecological concern
COPC	Chemical of potential concern
COPEC	Chemical of potential ecological concern
DTSC	Cal/EPA Department of Toxic Substances Control
EBS	Environmental baseline study
EPA	U.S. Environmental Protection Agency
EPC	Exposure point concentration
ERA	Ecological risk assessment
FFSRA	Federal Facility Site Remediation Agreement
HEAST	Health Effects Assessment Summary Tables
HHRA	Human health risk assessment
HI	Hazard index
HQ	Hazard quotient
HSAA	California Hazardous Substances Account Act
HSC	Health and Safety Code
IR	Installation Restoration
IRIS	Integrated Risk Information System
mg/kg	Milligrams per kilogram
mg/L	Milligrams per liter
NAVSTA TI	Naval Station Treasure Island
NBAR	Nonbinding Allocation of Responsibility
NCEA	National Center for Environmental Assessment
NCP	National Oil and Hazardous Substances Pollution Contingency Plan

ACRONYMS AND ABBREVIATIONS (Continued)

PAH	Polycyclic aromatic hydrocarbon
PA/SI	Preliminary assessment/site inspection
PCB	Polychlorinated biphenyl
PRC	PRC Environmental Management, Inc.
PRP	Potentially responsible party
RAB	Restoration Advisory Board
RAGS	Risk Assessment Guidance for Superfund
RfD	Reference dose
RI	Remedial investigation
RME	Reasonable maximum exposure
ROD	Record of decision
SARA	Superfund Amendments and Reauthorization Act
SF	Cancer slope factor
SVOC	Semivolatile organic compound
SWRCB	State Water Resources Control Board
TDS	Total dissolved solids
Tetra Tech	Tetra Tech EM Inc.
TI	Treasure Island
TIDA	Treasure Island Development Authority
TPH	Total petroleum hydrocarbons
TPH-e	Extractable total petroleum hydrocarbons
TPH-d	Total petroleum hydrocarbons as diesel
TPH-m	Total petroleum hydrocarbons as motor oil
TPH-p	Purgeable total petroleum hydrocarbons
UST	Underground storage tank
VOC	Volatile organic compound
Water Board	Cal/EPA San Francisco Bay Regional Water Quality Control Board
YBI	Yerba Buena Island

1.0 DECLARATION

This declaration describes the decision and declares that the decision satisfies the statutory and regulatory requirements of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) program. The declaration includes specific information such as site name and location, the purpose of the record of decision (ROD), a summary of site conditions, the decision itself, and the statutory determinations. This information is provided below.

1.1 SITE NAME AND LOCATION

Installation Restoration Site 09, Former Foundry, and Site 10, Former Bus Painting Shop
Naval Station Treasure Island
San Francisco, California

Naval Station Treasure Island (NAVSTA TI) is located in San Francisco Bay, midway between San Francisco and Oakland, California (Figure 1-1). The facility consists of two contiguous islands: Treasure Island (TI), which is approximately 403 acres (Figure 1-2), and Yerba Buena Island (YBI), which is approximately 147 acres. The U.S. Coast Guard owns 30 of the 147 acres on YBI. Treasure Island is manmade and is constructed of materials dredged from the bay; YBI is a natural island.

Site 09 is located in the central portion of the southern end of NAVSTA TI and includes Building 41 (the former foundry) and the paved area immediately adjacent to the northwest, south, and west sides of the building. Site 09 encompasses 11,000 square feet (Figure 1-3). The bay is located 300 feet southeast of Site 09.

Site 10 is located in the northeastern section of NAVSTA TI, north of 13th Street, between Avenue N and the island shoreline. Site 10 comprises Building 335 (the former bus painting shop) and the area immediately surrounding the building, which encompasses a total of 32,000 square feet (Figure 1-4).

1.2 STATEMENT OF BASIS AND PURPOSE

This decision document presents the basis for the no action decision for Sites 09 and 10 at NAVSTA TI. The no action decision was made in accordance with CERCLA, as amended by the Superfund Amendments and Reauthorization Act (SARA) of 1986, and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). This decision document satisfies all requirements of a ROD under CERCLA and is based on the administrative record for this site. In addition, the decision was made in accordance with the State of California Hazardous Substances Account Act (HSAA) codified in Chapter 6.8 of the California Health and Safety Code (HSC). It is the Navy's intent that this document meets the requirements of HSC Section 25356.1, which is a state requirement for remedial action plans at remedial sites; however for the purpose of this ROD HSC Section 25356.1 is not considered an applicable or relevant and appropriate requirement (ARAR). The "Statement of Reasons" and the

“Nonbinding Allocation of Responsibility” (NBAR) required by the HSAA are presented in Appendix A.

In 1992, the U.S. Department of the Navy entered into a Federal Facility Site Remediation Agreement (FFSRA) with the State of California that stipulates the type, scope, and schedule of environmental work to be conducted at NAVSTA TI. The FFSRA identifies the regulatory agencies responsible for oversight of all related work at NAVSTA TI. These agencies include the California Environmental Protection Agency’s (Cal/EPA) Department of Toxic Substances Control (DTSC), Region 2, and the Cal/EPA San Francisco Bay Regional Water Quality Control Board (Water Board).

The Navy, with the concurrence of DTSC and the Water Board as indicated by their signatures, has concluded no action is necessary at Sites 09 and 10 because soil and groundwater at Sites 09 and 10 do not pose unacceptable risk to human health or the environment. Although not a signatory agency, the U.S. EPA has reviewed all the major documents and concurs with the no action decision. This ROD is supported by the administrative record for this no action decision. The administrative record index for Sites 09 and 10 is presented in Appendix B.

1.3 DESCRIPTION OF THE SELECTED REMEDY (NO ACTION)

This ROD sets forth the no action decision under CERCLA for Sites 09 and 10 at NAVSTA TI.

Based on the information and data evaluated as part of the remedial investigations (RI) for Sites 09 and 10, soil and groundwater do not pose unacceptable human health or ecological risks. Therefore, the Navy has determined that no CERCLA action is necessary to protect public health or welfare or the environment. A brief summary of the investigations and the rationale that led to a no action decision for soil and groundwater are provided below.

Environmental data collected between June 1992 and November 2002 were used to delineate the extent of contamination in soil and groundwater at Sites 09 and 10. The final RI report presented the geologic, hydrogeologic, and chemical data collected during phase I, phase IIA, and phase IIB of the RI, quarterly groundwater sampling, the environmental baseline study (EBS), and additional RI field efforts conducted under the Navy Installation Restoration (IR) Program in the fall of 2002.

No major sources of organic or inorganic contamination were identified in soil or groundwater at either Site 09 or Site 10. Small and isolated amounts of contamination in soil were identified at various locations, and only contaminated soil that remained at the two sites was evaluated during the human health and ecological risk assessments. Two soil samples collected downgradient of the former hydraulic lift system at Site 09 exhibited total petroleum hydrocarbons (TPH) at concentrations of 7,100 milligrams per kilogram (mg/kg) and 7,600 mg/kg. Investigative findings concluded that TPH contamination was localized and did not affect groundwater at the site, however. “Nuisance” soil at Site 10 originating from nearby petroleum Site 14/22 was found to contain dioxin; the soil was excavated and removed. Nuisance soil is defined as either

odorous or visibly impacted soil present from 0 to 2 feet below ground surface (bgs) in unpaved areas. Dioxin is a class of compounds that includes polychlorodibenzo-p-dioxins and polychlorodibenzofurans. Confirmational sampling indicated that dioxin-contaminated soils above background levels for TI were successfully removed (Section 2.5.2.2).

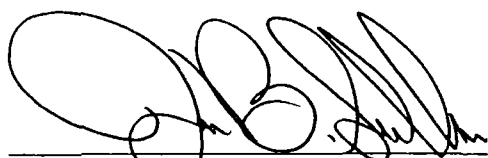
1.4 STATUTORY DETERMINATIONS

A no action decision was made for Sites 09 and 10 because soil and groundwater do not pose unacceptable risks to human health or the environment. Therefore, no remedial action is necessary to ensure protection of human health or the environment. There are no CERCLA Section 121 statutory determinations for this ROD because the no action decision was made. A 5-year review will not be required for Sites 09 and 10 per CERCLA Section 121(c) and NCP Section 300.430(f)(5)(iii)(C) because there are no hazardous substances, pollutants, or contaminants that would not allow for unlimited use and unrestricted exposure.

1.5

DECLARATION STATEMENT AND AUTHORIZING SIGNATURES

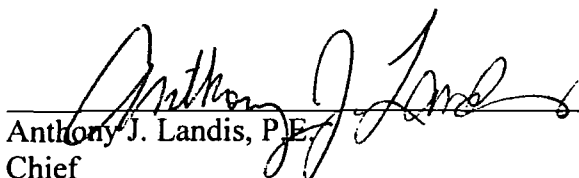
Based on the evaluation of analytical data, historical information, assessment of risk, and site inspections described in the final RI report (SulTech 2005), the Navy, with the concurrence of DTSC and the Water Board, has concluded that no remedial action is necessary for Sites 09 and 10 at NAVSTA TI. The results of the human health risk assessment (HHRA) and the ecological risk assessment (ERA) indicate that concentrations of hazardous substances present in soil and groundwater at Sites 09 and 10 do not present an unacceptable risk. Therefore, the no remedial action decision is protective of human health and the environment. In addition, the 5-year review of CERCLA Section 121(c) and NCP Section 300.430(f)(5)(iii)(C) is not required.



James B. Sullivan
Base Realignment and Closure Environmental
Coordinator
Naval Station Treasure Island
U.S. Department of the Navy

2 October 2007

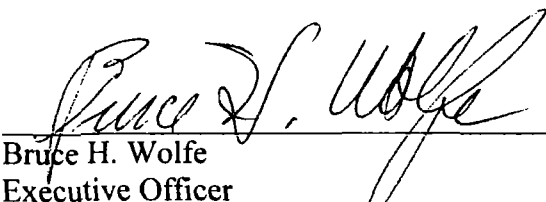
Date



Anthony J. Landis, P.E.
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Northern California Operations
Office of Military Facilities

9-18-07

Date



Bruce H. Wolfe
Executive Officer
California Regional Water Quality Control Board
San Francisco Bay Region

September 7, 2007

Date

2.0 DECISION SUMMARY

This decision summary provides an overview of the installation and its history, environmental conditions, potential risks from soils and groundwater at Sites 09 and 10 at NAVSTA TI, and the basis for the no action decision.

2.1 SITE NAME, LOCATION, AND DESCRIPTION

NAVSTA TI lies in San Francisco Bay, midway between San Francisco and Oakland, California, and consists of two contiguous islands: TI and YBI. Sites 09 and 10, located on TI, are former industrial facilities that provided various types of naval support. A brief description of each site is provided below.

Site 09 encompasses 11,000 square feet in the southern end of NAVSTA TI and includes Building 41 (the former foundry) and the paved area immediately adjacent to the northwest, west, and south sides of the building. Building 41 has been used for multiple purposes since the early 1940s, including as a forge and foundry, a paint shop, a vehicle maintenance shop, a welding training school, a small boat maintenance shop, a wood shop for building movie sets, and a storage building for oil spill containment equipment. The building is currently vacant.

Site 10 includes 32,000 square feet in the northeastern section of NAVSTA TI, north of 13th Street, between Avenue N and the island shoreline. Site 10 includes Building 335 (the former bus painting shop) and the area immediately surrounding the building. Building 335 was built during the mid-1940s. It was used throughout the years as a bus painting shop, a paint mixing facility, and a building where pesticides and chlorinated herbicides were mixed and handled. At one time, it reportedly contained a self-service steam rack used to clean vehicles, drums, garbage cans, and related equipment. Currently, the building and surrounding area are leased by a local landscaping contractor for use as equipment storage and staging, as well as a wood-chipping area.

The Navy is the lead agency for Sites 09 and 10; however, the Navy and the State of California entered into a FFSRA that stipulates the type, scope, and schedule of environmental work to be conducted at NAVSTA TI (Navy 1992). The FFSRA identifies the regulatory agencies responsible for oversight of all related work at NAVSTA TI. These agencies include DTSC and the Water Board. All remediation efforts on NAVSTA TI are governed by this FFSRA.

In addition, a NAVSTA TI project team has been established and is led by the Base Realignment and Closure (BRAC) environmental coordinator. Monthly project team meetings are held to periodically review the program and reach consensus on decisions with federal and state regulatory agencies. The BRAC cleanup team (BCT) includes the BRAC environmental coordinator, the Navy remedial project manager (RPM), other representatives from the Navy, representatives of DTSC, representatives of U.S. Environmental Protection Agency (EPA) Region IX, and representatives of the Water Board.

All clean up at NAVSTA TI is implemented and funded under the base-wide IR Program.

2.2 SITE HISTORY AND ENFORCEMENT ACTIVITIES

TI was built in 1936 and 1937 on the Yerba Buena Shoals; a sand spit that extends from the northwest point of YBI. The island was originally used for the Golden Gate International Exposition in 1939. In 1941, in response to a Navy request, the City of San Francisco leased TI, YBI, and the surrounding offshore area to the Navy for the duration of World War II. After the war, the City of San Francisco agreed to trade the deed of NAVSTA TI to the Navy in exchange for government-owned land south of San Francisco. The Navy operated TI for various Naval activities including a medical clinic, fuel farm, service station, fire training school, waterfront facilities, ammunition storage, troop and family housing, personnel support, a brig, and a Navy and Marine Corps museum.

The IR Program was established by the Department of Defense in 1975 to identify, assess, characterize, and clean up or control contamination caused by historical disposal activities and other operations at military installations. The Navy IR Program was formally established in 1986 and is carried out in accordance with all federal, state and local laws. The primary federal laws are CERCLA and SARA and the implementing regulations in the NCP.

The preliminary assessment/site inspection (PA/SI) was completed at NAVSTA TI in April 1987 (Dames and Moore 1988). In 1994 and 1995, the Navy conducted a thorough EBS (ERM-West, Inc.1995), and the U.S. EPA conducted an aerial photograph survey during 1995 and 1996 (SulTech 2005).

Environmental data collected between June 1992 and November 2002 were used to delineate the extent of contamination in soil and groundwater at Sites 09 and 10. The final RI report (SulTech 2005) presented the geologic, hydrogeologic, and chemical data collected during phase I, phase IIA, and phase IIB of the RI, quarterly groundwater sampling, the EBS, and additional RI field efforts conducted under the Navy IR Program during the fall of 2002. In addition, activities related to trenching, and confirmation soil sampling for dioxin were summarized in a final technical memorandum (Shaw 2006). No major sources of organic or inorganic contamination were identified in soil or groundwater at either Site 09 or Site 10 (see Section 2.5.2).

The results of these investigations were compiled and used as a basis to evaluate potential human health and ecological risks. The HHRA was completed following Navy and EPA regulatory guidelines as part of the draft RI report (Tetra Tech EM Inc. [Tetra Tech] 2003). However, comments received from DTSC requested that the risk assessment be revised to follow newer (September 2003) agreements in principle between the Navy and State of California. The Navy therefore agreed to revise the HHRA to meet the regulatory requests from the DTSC, and still fulfill the regulatory requirements of EPA and Navy guidance. The Navy developed a second HHRA using DTSC's guidelines and the Navy's newer September 2003 dual-tracking risk assessment guidance (SulTech 2004), which also was issued after the first draft of the Sites 09 and 10 HHRA was already in review.

A revised draft HHRA was submitted to the BCT in September 2004 (SulTech 2004). This HHRA strategy was based on a technical conference call with the Navy on December 5, 2003, and a meeting with DTSC and the Water Board on March 8, 2004, to outline the dual-tracking risk assessment approach. The final RI report (SulTech 2005) incorporated the revised draft HHRA (SulTech 2004) and the consensus reached in December 2004 on the responses to comments on the draft RI report (Tetra Tech 2003) and the revised draft HHRA.

A proposed plan was published for Sites 09 and 10 on September 29, 2006 (SulTech 2006), and an invitation to comment was issued. The proposed plan summarized site characteristics and site risks, and recommended that the IR Program effort for soil and groundwater at Sites 09 and 10 should be to pursue site closure through a no action ROD.

No enforcement activities are related to Sites 09 and 10. Environmental investigations associated with Sites 09 and 10 were implemented under the base-wide IR Program, as discussed above.

2.3 COMMUNITY PARTICIPATION

The final community relations plan for NAVSTA TI (Tetra Tech 2002) was updated in July 2006 (Tetra Tech 2006). The Navy maintains an active community participation program through the NAVSTA TI Restoration Advisory Board (RAB). The RAB is made up of federal, state, and local government representatives and citizens. Through regular meetings, the Navy informs the RAB of the progress of investigations and solicits input on planned environmental investigations and actions. In addition, the Navy issues fact sheets and newsletters to keep the public informed of IR Program activities at NAVSTA TI and follows CERCLA community relations requirements.

The final RI report for Sites 09 and 10 at NAVSTA TI was completed in March 2005 (SulTech 2005). The proposed plan for Sites 09 and 10 was released to the public on September 29, 2006 (SulTech 2006). The final RI report and the proposed plan were made available for a 30-day public review through both the administrative record located at the Department of the Navy, Naval Facilities Engineering Command, Southwest Division in San Diego, California; and the information repositories located at 410 Palm Avenue, Building 1, Room 161, Treasure Island, San Francisco, California, and the San Francisco Public Library in the Government Publications Section, 100 Larkin Street, San Francisco, California.

The notice of availability for the proposed plan was published in the *San Francisco Chronicle* on September 28, 2006. A public comment period was held through October 31, 2006. A public meeting was held on October 17, 2006, at the Casa de la Vista, Building 271, Treasure Island, San Francisco. Representatives from the Navy and DTSC were available at this meeting to answer questions about Sites 09 and 10 at NAVSTA TI and to describe the basis for proposing no action. The Navy's response to comments received during the public meeting and the public comment period is included in the responsiveness summary (Section 3.0). The public notice, roster of public meeting attendees, and public meeting transcript are included in Appendix C.

These community participation activities fulfill the requirements of Sections 113(k)(2)(B)(i-v) and 117(a)(2) of CERCLA, Section 300.430(f)(3) of the NCP, and the HSAA (HSC Section 25356.1).

2.4 SCOPE AND ROLE OF RESPONSE ACTION

Sites 09 and 10 at NAVSTA TI are the subject of this no action ROD and include soil and groundwater associated with these sites. A no action decision for Sites 09 and 10 would not adversely affect the planned reuse or future remedial decisions at NAVSTA TI.

Environmental data collected between 1992 and 2002 were used to delineate the extent of contamination in soil and groundwater at Sites 09 and 10. The final RI report (SulTech 2005) presented all data collected during phase I, phase IIA, and phase IIB of the RI; quarterly groundwater sampling; the EBS; and additional RI field efforts conducted under the Navy IR Program. These investigations concluded that no major sources of organic or inorganic contamination were found in soil or groundwater at either Site 09 or Site 10. Small and isolated amounts of contamination in soil were identified at various locations, and only contaminated soil that remained at the two sites was evaluated during the human health and ecological risk assessments.

Two soil samples collected downgradient of the former hydraulic lift system at Site 09 exhibited TPH concentrations of 7,100 mg/kg and 7,600 mg/kg. Investigative findings concluded that TPH contamination was localized and did not affect groundwater at the site. "Nuisance" soil at Site 10 originating from nearby petroleum Site 14/22 was excavated and dioxin-contaminated soil was removed. Confirmational sampling indicated that dioxin-contaminated soils above TI background levels were successfully removed (Section 2.5.2.2).

HHRAs and an ERA completed on these data concluded no risk to human health or the environment is associated with soil or groundwater at either Site 09 or Site 10.

2.5 SUMMARY OF SITE CHARACTERISTICS AND SAMPLING HISTORY

The following sections provide a summary of the site characteristics and sampling history for Sites 09 and 10 at NAVSTA TI.

2.5.1 Site Characteristics

The sections below summarize the characteristics of Sites 9 and 10 based on previous investigations. Additional details can be found in the final RI report (SulTech 2005).

2.5.1.1 *Characteristics of Site 09*

Site 09 is located in the central portion of the southern end of NAVSTA TI and includes Building 41 (the former foundry) and the paved area immediately adjacent to the northwest, south, and west sides of the building.

Building 41 has been used for multiple purposes since the early 1940s (Section 2.1). One floor drain or sump was observed next to the paint booth when Building 41 was inspected during the phase I RI. Paints used at this building are likely to have contained lead and zinc-chromium based pigments. In addition, two former trenches located in the large middle room and now filled in with concrete are apparently the remaining structures associated with a former hydraulic lift system. These trenches, along with the former hydraulic lift system, suggest that vehicle maintenance may have been performed at this location. A 30-gallon underground storage tank (UST), previously used as a hydraulic oil reservoir for the former hydraulic lift, has been removed. No records were found to describe the removal of the former hydraulic lift system; however, site inspections indicate that this lift has been removed. From 1981 to 1987, the Navy Technical Training Center used the building as a welding training school. In 1994, the building was used for small boat maintenance, primarily bodywork. In 1997, the building was being used as a wood shop for movie sets and to store oil spill containment equipment. The building is currently vacant (SulTech 2005).

The outdoor area around Building 41 has apparently been paved for most of the building's existence. The building is a two-story structure and appears in good condition. The interior floor is slab on grade construction, and several rooms are finished with linoleum flooring. The roof appears sound, and no obvious leaks were observed in the interior of the building. A paint booth was previously located in the northeast corner of Building 41, and a floor drain was adjacent to the paint booth. Two storm drain catch basins are located just outside the boundary of the IR site. The actual locations of utility lines within the footprint of Building 41 were not included on the utility maps obtained for NAVSTA TI (SulTech 2005).

2.5.1.2 *Characteristics of Site 10*

Site 10 is located in the northeastern section of NAVSTA TI, north of 13th Street, between Avenue N and the island shoreline, and has been used to satisfy a variety of purposes through time (Section 2.1). Handling practices reported at similar facilities on NAVSTA TI indicate that waste paints, thinners, and solvents may have been released onto the ground near Building 335. Building 335 was also reportedly used for storing, mixing, and handling pesticides and chlorinated herbicides during an unspecified period. Solution residues were reportedly washed from containers and spraying equipment. It was also reported that Building 335 housed a self-service steam rack used to clean vehicles, drums, garbage cans, and related equipment. A floor drain was reportedly used in the building and was connected to the storm water system. Inspections of the building in March 1994 and September 2001 revealed an area patched with cement that may have been the former location of the floor drain. Recently, the building and surrounding area have been leased by a local landscaping contractor for use as an equipment storage and staging area, as well as a wood-chipping area (SulTech 2005).

The outdoor area around Building 335 has been partly paved for most of the building's existence. The building is a one-story structure and appears to be in good condition. It currently is used to store landscaping equipment and materials. The interior floor is slab on grade construction. The roof likewise appears to be in good condition. A large "L"-shaped floor drain was present at one time in the northern half of the building, but has been filled in with concrete. Drainage from this floor drain is unknown. The actual locations of utility lines within the footprint of Building 335 were not included on the utility maps obtained for NAVSTA TI, except for a portion of two storm drain lines at the south side of the building. These lines pass into the catch basins immediately outside Building 335 and beneath the overhang and intersect an east-west storm drain line that flows into the bay (SulTech 2005).

2.5.2 Sampling History

A summary of the historical sampling and analysis during phase I, phase IIA, and phase IIB of the RI, quarterly groundwater sampling, EBS, and additional RI field efforts at Site 09 and Site 10, as presented in the final RI report (SulTech 2005), are provided in the following sections.

2.5.2.1 Sampling and Analysis – Site 09

The objective of the phase I RI soil sampling at Site 09 was to evaluate whether subsurface soil surrounding Building 41 had been contaminated. Phase I RI soil boring locations were selected based on the findings of the PA/SI. The PA/SI identified areas adjacent to the building where disposal of hazardous wastes most likely occurred.

Based on the analytical results from the phase I RI samples, soil and groundwater samples were collected as part of the phase IIB RI to assess the extent of lead contamination in the south-central region of Site 09. Also as part of the phase IIB RI, soil, groundwater, oily waste, and wastewater samples were collected to delineate the nature and extent of contamination in and around the former concrete lift system trenches and floor drain and sump inside Building 41.

Because previous investigations identified soil and groundwater contamination at Site 09, an additional RI was conducted in the fall of 2002. The RI was conducted to (1) determine the horizontal and vertical extent of soil and groundwater contamination at Site 09, and (2) evaluate groundwater flow gradients and water quality impacts to the Bay. Soil and groundwater samples were analyzed for volatile organic compounds (VOC), semivolatile organic compounds (SVOC), pesticides, polychlorinated biphenyls (PCB), TPH, and metals.

Soil Sampling at Site 09

Twelve 12 soil samples from four soil borings (09-SB01 to 09-SB04) were analyzed for VOCs, SVOCs, pesticides, PCBs, and metals during the phase I RI. Five additional soil samples were reanalyzed for SVOCs in December 1992 because the original sample results were not usable (PRC 1997). Fifteen soil samples from six hydraulic punch borings (09-HP001 to 09-HP006)

were collected during the phase IIB RI; the soil samples were analyzed for specific analytes according to the phase IIB RI sampling plan (SulTech. 2005).

Two sludge samples were collected from the trench for the former hydraulic lift. One sample was analyzed for PCBs, and a fuel fingerprint was completed on the other.

Twenty-one soil borings were drilled during the fall 2002 RI. Three soil samples were collected from each borehole except for soil boring 09-SB09, where a building footing was encountered preventing sample collection. All samples were analyzed for VOCs, SVOCs, pesticides, PCBs, TPH-e, TPH-p, and metals. An additional three samples were collected from boring 09-SB05 and analyzed for lead only.

Results of samples collected at Site 09 indicated no major sources of organic or inorganic contamination in soil. Small and isolated amounts of contamination in soil were identified at various locations, including the former hydraulic lift system, which was considered a potential source of TPH contamination. TPH as diesel (TPH-d) and TPH as motor oil (TPH-m) contamination was reported in soil from a sample collected during the phase II RI immediately adjacent to the lift system. TPH-d was reported at a concentration of 38,000 mg/kg, and TPH-m was reported at a concentration of 12,000 mg/kg. Results from other samples during the additional RI reported the highest concentration of TPH-d at 1,300 mg/kg and TPH-m at 430 mg/kg from the same area. Both TPH-d and TPH-m concentrations are below TPH screening criteria (SulTech. 2005).

Elevated concentrations of TPH-d at 7,600 mg/kg and 7,100 mg/kg were found near the southeastern corner of the Site 09 boundary during the additional RI associated with sampling downgradient of the hydraulic lift system. Additional soil samples collected in the area showed that the contamination appears localized (SulTech 2005).

Groundwater Sampling at Site 09

Groundwater samples were not collected at Site 09 during the phase I RI. The phase IIB RI collected groundwater samples to evaluate whether groundwater contamination was present at the site. Groundwater samples were obtained from one monitoring well (09-MW01) and eight direct-push borings (09-HP001 through 09-HP008) at Site 09 during the phase IIB RI.

Six new monitoring wells (09-MW02 through 09-MW07) were installed at Site 09 during the fall 2002 RI. The six new monitoring wells along with the previously installed monitoring well 09-MW01 were sampled during the additional RI. All groundwater samples were analyzed for VOCs, SVOCs, pesticides, PCBs, TPH-e, TPH-p, and metals.

One water sample was collected from the floor drain located next to the paint booth in Building 41. It was analyzed for SVOCs and metals.

Results of groundwater sampling from past efforts indicated no major sources of groundwater contamination (SulTech 2005).

2.5.2.2 *Sampling and Analysis – Site 10*

The main objective of the phase I RI at Site 10 was to assess the nature and extent of possible contamination in soils around Building 335. The purpose of the phase IIB RI was to investigate data gaps that remained after the phase I RI had been completed. One objective was to delineate the extent of potential diesel and polycyclic aromatic hydrocarbon (PAH) contamination in soil and groundwater near Building 335 and to identify the source of the petroleum. Additionally, the phase IIB RI evaluated the potential contamination in storm drain catch basins.

Because previous investigations identified soil and groundwater contamination at Site 10, an additional RI was conducted in the fall of 2002. The RI was conducted to (1) determine the horizontal and vertical extent of soil and groundwater contamination at Site 10, and (2) evaluate groundwater flow gradients and water quality impacts to the Bay. Soil and groundwater samples were analyzed for VOCs, SVOCs, pesticides, PCBs, TPH, and metals.

Soil Sampling at Site 10

Twelve soil samples were collected from 4 soil borings (10-SB01 to 10-SB04) to investigate the potential contamination. One soil boring (10-SB01) was drilled to a depth of 20 feet bgs to examine the site stratigraphy, and the remaining three soil borings were hand-augered to a depth of 6.5 feet bgs because of access problems. All four soil borings were located in visibly stained areas surrounding three small former aboveground storage tanks (AST) previously located east of Building 335. The samples were analyzed for VOCs, SVOCs, metals, pesticides/PCBs, chlorinated herbicides, and extractable TPH (TPH-e) (SulTech. 2005).

During the phase IIB RI, 24 samples from nine direct-push borings (07/10HP001, 002, 004, 006, 007, 008, 009, 010, and 011) were collected and analyzed for TPH and total PAHs using immunoassay test kits. Samples were collected from the surface down to depths of 7 to 10 feet bgs. Based on the field screening, 21 soil samples from 10 direct-push borings (07/10HP001, 002, 004, 006, 007, 008, 010, 011, 012, and 013) were selected for analysis at an off-site laboratory for VOCs, SVOCs, pesticides, chlorinated herbicides, metals, and TPH-e (SulTech. 2005).

Two sediment samples were collected from two catch basins located southeast and northwest of Building 335. These samples were analyzed for VOCs, TPH-e, purgeable TPH (TPH-p), SVOCs, PCBs, pesticides, lead, and herbicides.

Twenty-five borings (10-SB05 through 10-SB29) were drilled at Site 10 during the additional RI. Three soil samples were collected from each borehole. Samples from nine of the boreholes centered around previously drilled boring 10-SB03 were analyzed for SVOCs only. Samples from 12 of the boreholes centered around previously drilled boring 07/10-HP006 were analyzed

for pesticides only. Samples from two boreholes drilled inside Building 335 and two boreholes drilled on the south side of the building were analyzed for VOCs, SVOCs, pesticides, PCBs, TPH-e, TPH-p, and metals.

Results of historic soil sampling efforts at Site 10 indicated no major sources of organic or inorganic contamination; however, small and isolated amounts of contamination in soil were identified at various locations (SulTech 2005).

In August 2004 as part of a petroleum investigation at adjacent petroleum Site 14/22, a Navy contractor encountered a 2-inch-thick layer of heavy (very viscous) petroleum that migrated off the petroleum site boundary, north toward Site 10. The petroleum was found at a consistent depth of 5 to 6 inches below grade in an approximately 20-foot by 20-foot irregularly shaped area. The nuisance soil was excavated to a depth of 1 foot below grade under petroleum "nuisance" criteria and analyzed for dioxins, TPH, VOCs, and PAHs. Nuisance soil is defined as either odorous or visibly affected soil present from 0 to 2 feet bgs in unpaved areas. After excavation, four soil confirmation samples were collected from the excavation sidewalls. Non-detected to low concentrations of TPH were found in the soil.

No VOCs were detected in the samples, and PAHs were detected at low concentrations. Sampling confirmed that the petroleum layer had been completely removed. The excavation area was subsequently backfilled with clean imported topsoil. The Navy received no further action concurrence from the Water Board for the petroleum layer (SulTech 2006).

A burnt layer was also encountered in the northern Site 14/22 excavation during the same petroleum program investigations at adjacent Site 14/22. In association with the petroleum contamination, the burnt layer of soil was removed up to the southern boundary of Site 10. A trenching investigation for dioxins in soils that extended north onto Site 10 was completed in November 2005 to confirm the extent of burnt material and dioxins. The burnt layer at Site 10 was further investigated and soil samples were collected from the layer, with dioxins identified at concentrations above TI background levels. Shallow soil trenching and removal, along with confirmation soil sampling, were completed. Based on results from confirmation samples, dioxin-contaminated soils above TI background levels were successfully removed. The analytical results were reviewed with the BCT and, based on concurrence from the DTSC, the trench was backfilled with clean soil (SulTech 2006). Trenching, soil excavation and removal, as well as the results of confirmational soil sampling, are summarized in a final technical memorandum (Shaw 2006) provided as Appendix D to this ROD.

Groundwater Sampling at Site 10

Groundwater samples were not collected at Site 10 during the phase I RI. Seventeen additional direct-push locations were selected during the phase IIB RI, however, based on contamination detected at primary sampling locations. One groundwater sample was collected from each of the direct-push locations (07/10HP001, 002, 004, 006, 007, 008, 009, 010, 011, 012, 013, 014, 015, 016, 017, 018, and 019) to delineate the extent of contamination in the groundwater. Thirteen groundwater samples were field screened for TPH, and 11 samples were analyzed by an off-site

laboratory for VOCs, TPH-e, SVOCs, PCBs, pesticides, metals (sometimes only lead), and herbicides (SulTech 2005). One surface water grab sample was collected from the catch basin northwest of Building 335 and analyzed for VOCs, TPH-e, TPH-p, SVOCs, PCBs, pesticides, lead, and herbicides.

Groundwater monitoring wells 10-MW02 and 10-MW03 were installed and sampled during the additional RI. Samples from monitoring well 10-MW02 were analyzed for pesticides only. Samples from monitoring well 10-MW03 were analyzed for VOCs, SVOCs, pesticides, PCBs, TPH-e, TPH-p, and metals.

Results of historic groundwater sampling at Site 10 indicated no major sources of groundwater contamination. Pesticide contamination reported north of Building 335 at Site 10 during the phase II RI appears to have been associated with sediment entrained in the groundwater sample. Follow-up sampling during the additional RI did not report pesticide concentrations in groundwater at this area.

2.6 CURRENT AND POTENTIAL FUTURE LAND AND RESOURCE USE

In 1993, the BRAC Commission, pursuant to the Defense Base Closure and Realignment Act of 1990 (Pub. L. 101-510, Title XXIX, 10 USC § 2687 note), recommended the closure of NAVSTA TI. NAVSTA TI was subsequently closed on September 30, 1997. NAVSTA TI is currently in the process of being transferred. Potential future land and resource use is discussed below.

Land Use

The most likely future land use for both Sites 09 and 10 is commercial/industrial. According to the draft 1996 reuse plan (City and County of San Francisco [CCSF] 1996), the reuse for the area that includes Site 09 is designated as a "Film Production/Conference Center". This designation includes land that could be used for publicly oriented recreation/cultural/entertainment and specifically as a film/events district. The reuse for the area that includes Site 10 is designated as "Residential/Open Space/Publicly Oriented Uses". This reuse includes land designated for institutional use, specifically as a public facilities district. Residential housing may be associated with the proposed reuse at both Sites 09 and 10.

Resource Use

As part of the November 1995 groundwater sampling event, groundwater samples from all 86 wells at NAVSTA TI were analyzed for total dissolved solids (TDS). Using the TDS criterion of 3,000 milligrams per liter (mg/L) to define potential sources of drinking water as defined by the State Water Resources Control Board (SWRCB), Resolution No. 88-63, potentially suitable drinking water at NAVSTA TI exists from the water table surface to an estimated depth of 33 feet bgs.

The minimum production criterion to define potential sources of drinking water is a well yield of more than 200 gallons per day (SWRCB 1988). Pump tests, well development rates, and hydraulic conductivity values from slug testing (5 to 16 feet per day) indicate NAVSTA TI wells can yield more than 200 gallons per day.

Under the Bay Basin water quality control plan (Basin Plan), all groundwater within the Bay Basin that meets the criteria of SWRCB Resolution No. 88-63 has a potential beneficial use for municipal or domestic supply (SWRCB 1988). The Water Board, however, completed a pilot beneficial use designation project for several groundwater basins in San Francisco and Northern San Mateo Counties, including NAVSTA TI and YBI (Water Board 1996). The report indicated that the use of groundwater for municipal and domestic supply at NAVSTA TI would be limited by (1) the small volume of fresh groundwater available, (2) the likelihood of saltwater intrusion, and (3) potential future ground improvements for stability (stone columns and dynamic compaction). Consequently, the report recommended that the Basin Plan be revised so that groundwater at NAVSTA TI is no longer designated as a potential municipal or domestic water supply but to retain designation for potential agricultural, process, and industrial supply. These recommendations apply to current and future use of groundwater resources at Sites 09 and 10 at NAVSTA TI.

2.7 SUMMARY OF SITE RISKS

The baseline risk assessment estimates risks posed for the site if no action were taken. It provides the basis for taking action and identifies the contaminants and exposure pathways that need to be addressed by any proposed remedial action. This section of the ROD introduces basic risk assessment nomenclature and summarizes the results of baseline risk assessments for Sites 09 and 10 at NAVSTA TI.

Risk values are probabilities that are usually expressed in scientific notation (for example, 1×10^{-6}). An excess lifetime cancer risk of 1×10^{-6} indicates that an individual experiencing the reasonable maximum exposure (RME) estimate has a 1 in 1,000,000 chance of developing cancer as a result of site-related exposure, referred to an "excess lifetime cancer risk" because it would be in addition to the risks of cancer individuals face from other causes (such as smoking or exposure to too much sun). EPA's generally acceptable risk range for site-related exposure is 1×10^{-4} to 1×10^{-6} and is referred to as the "risk management range."

The potential for noncarcinogenic effects is evaluated by comparing an exposure level over a specified period (for example, an entire life-time) with a reference dose (RfD) derived for a similar exposure period. An RfD represents a level that an individual may be exposed to that is not expected to cause any deleterious effect. The ratio of exposure to toxicity is called a hazard quotient (HQ). An HQ less than 1 indicates that a receptor's dose of a single contaminant is less than the RfD and that toxic noncancer effects from the chemical are unlikely. The hazard index (HI) is generated by adding the HQs for all chemicals that affect the same target organ or that act through the same mechanism within a medium or across all media to which a given individual may be exposed. An HI less than 1 indicates that toxic noncancer effects from all contaminants

are unlikely. An HI greater than 1 indicates that site-related exposures may present a risk to human health.

Human health cancer risk and noncancer hazard index summaries for Sites 09 and 10 are provided in Table 2-1 and Table 2-2. Risks for the industrial worker, future industrial worker, future construction worker, and future resident (adults and children) scenarios were found to be within the risk management range of 1×10^{-4} to 1×10^{-6} . This level of risk was considered insignificant at both Sites 09 and 10. In addition, ERA found that groundwater at Sites 09 and 10 did not pose an unacceptable risk to aquatic biota. No terrestrial habit was identified at either site, and risks were not evaluated for terrestrial receptors. The following sections provide a more complete summary of both the human health and ecological risks for Sites 09 and 10.

2.7.1 Human Health Risks

A quantitative baseline HHRA was completed in 2004 based on phase I and phase II RI basewide groundwater monitoring data, as well as additional RI data collected from IR sites from 1994 through 2002 and in 2004 (SulTech 2004). The HHRA was revised in 2005 to incorporate DTSC guidelines and the Navy September 2003 dual-tracking risk assessment guidance (SulTech 2005). The following sections discuss aspects of the HHRA related to (1) identification of COCs, (2) the exposure assessment, (3) the toxicity assessment, (4) risk characterization, and (5) HHRA results.

2.7.1.1 Identification of COPCs

COPCs represent those site-related chemicals assumed to account for the majority of any estimated health impacts at a site and are considered contributors to “incremental site risk.” COPCs were selected for chemicals detected in soil as follows:

- If the maximum detected chemical concentration in soil exceeded the EPA (2002a) residential PRG for soil, it was retained as a COPC. Residential soil PRGs account for chemical exposures associated with incidental ingestion, dermal contact, and inhalation of soil particulates and vapors by persons living in an area of contamination.
- If an inorganic chemical is considered an essential nutrient (such as calcium, magnesium, potassium, or sodium), it was excluded as a COPC if the maximum reported concentration fell below levels associated with adverse health effects.
- Consistent with Navy (2001) and DTSC (1997) guidance, inorganic analytes statistically shown to be below ambient concentrations in ambient fill material (see Attachment I3) were eliminated as COPCs.

COPCs identified in soil at Sites 09 and 10 included iron, benzo(a)pyrene, and dibenz(a,h)-anthracene.

Potential exposure to chemicals in groundwater would occur only through inhalation of volatile compounds migrating upward into the air (breathing zone) because groundwater at Sites 09 and 10 is not a source of municipal or domestic drinking water (Section 2.6). For this reason, only VOCs were evaluated as potential COPCs in groundwater (SulTech 2004). Based on this evaluation, no COPCs were identified for groundwater at either Sites 09 or 10.

2.7.1.2 Exposure Assessment

Under the exposure assessment, potential human populations and related exposure pathways were identified based on current and expected future uses of the land. This step also involved compiling or developing receptor-specific intake assumptions, estimating exposure point concentrations (EPC), and estimating daily chemical intakes for each receptor. Together with chemical intakes, EPCs were used to estimate pathway-specific intakes (doses) for use in subsequent risk calculations. For Sites 09 and 10, a hypothetical future resident, an industrial worker, and a construction worker receptor were all evaluated. A recreational user was not evaluated at either of these NAVSTA TI sites because future reuse indicated other receptors were more appropriate.

The standard EPA methods (EPA 2002b) were used to estimate EPCs for direct-contact exposures (for example, ingestion of soil), and the EPC was based directly on the measured COPC levels in soil. The standard EPA Risk Assessment Guidance for Superfund (RAGS) equations were applied to determine daily doses (EPA 1989). Daily doses represent an estimated amount of a COPC to which a hypothetical human receptor might be exposed and were estimated for each receptor and each complete and significant exposure pathway.

2.7.1.3 Toxicity Assessment

The toxicity assessment for the HHRA included identification of toxicity values used to characterize noncancer health effects and cancer risk, respectively. Toxicity factors recommended by EPA Region IX were compiled from EPA-approved sources following the recommended hierarchy:

- Integrated Risk Information System (IRIS)
- National Center for Environmental Assessment (NCEA)
- Health Effects Assessment Summary Tables (HEAST)

RfD were developed to evaluate noncancer effects, and cancer slope factors (SF) were developed to evaluate chemicals classified as known or potential human carcinogens (EPA 1989). In the event a chemical was considered to cause both cancer and noncancer adverse health effects, both SFs and RfDs were listed for a chemical. Toxicity values were compiled for each COPC identified for each of the two sites, and cancer risks and noncancer adverse health effects were estimated.

2.7.1.4 Risk Characterization

The risk characterization step combines the results of the previously described steps to estimate cancer risks and noncancer effects (as HI). Because carcinogens and noncarcinogens manifest their effects through uniquely different mechanisms, adverse health effects are estimated separately for chemical carcinogens and noncarcinogens. For each receptor, cancer risks and HIs were estimated separately for each COPC and each complete exposure pathway. Cancer risk estimates and HIs were then summed across media and exposure pathways for a combined effect estimate. Detailed results of the HHRA including incremental and total risks for soils at Sites 09 and 10 are provided below.

2.7.1.5 Results of HHRA

Incremental Risk for Soils

The following risks to human health were calculated for Site 09:

- The current industrial worker RME multipathway cancer risk was 5×10^{-7} .
- The future industrial worker RME multipathway cancer risk was 1×10^{-6} .
- The future construction worker RME multipathway cancer risk was 1×10^{-7} .

The future resident (adult plus child) multipathway cancer risk was 2×10^{-6} (A future resident is a human receptor potentially affected by future redevelopment plans while residing at the site, for scenarios where there is minimal disturbance of surface soils).

- The future intrusive resident (adult plus child) multipathway cancer risk was 4×10^{-6} (A future intrusive resident is a human receptor potentially affected by future redevelopment plans while residing at the site, including scenarios where regrading or excavation could redistribute subsurface soils to the surface).
- The noncancer HI for the same risk scenarios was less than 1.

The following risks were calculated for Site 10:

- The current industrial worker RME multipathway cancer risk was 3×10^{-7} .
- The future industrial worker RME multipathway cancer risk was 1×10^{-6} .
- The future construction worker RME multipathway cancer risk was 1×10^{-7} .
- The future resident (adult plus child) multipathway cancer risk was 1×10^{-6} .
- The future intrusive resident (adult plus child) multipathway cancer risk was 5×10^{-6} .

- The noncancer HI for the same risk scenarios was less than 1.

The most significant exposure pathways at Sites 09 and 10 are dermal contact and soil ingestion for the future resident scenario. Results for multiple pathway risk fall within the target risk range for this scenario and for the industrial worker scenario as well.

Total Risk for Soils

- The following risks were calculated for Site 09 surface soil. The industrial worker RME multipathway total cancer risk was estimated at 7×10^{-6} (associated with all detections); 6×10^{-6} is attributable to ambient levels of inorganic compounds. The resident (adult plus child) RME multipathway total cancer risk was estimated at 3×10^{-5} (associated with all detections); 2×10^{-5} is attributable to ambient levels of inorganic compounds. The surface soil RME multipathway total noncancer hazard for the industrial worker was estimated at below 0.1 (associated with all detections); 0.08 is attributable to ambient levels of inorganic compounds. The resident (adult plus child) RME multipathway total noncancer hazard was estimated at 2 (associated with all detections); 0.9 is attributable to ambient levels of inorganic compounds. None of the target organ HIs for a residential scenario at Site 09 surface soil was estimated at more than 1.
- The following risks were calculated for subsurface soil at Site 09. The RME multipathway total cancer risk for the industrial worker was estimated at 5×10^{-6} (associated with all detections); 3×10^{-6} is attributable to ambient inorganics. The resident (adult plus child) RME multipathway total cancer risk was estimated at 2×10^{-5} (associated with all detections); 1×10^{-5} is attributable to ambient levels of inorganic compounds. The industrial worker RME multipathway total noncancer hazard was estimated at 0.1 (associated with all detections); 0.05 is attributable to ambient levels of inorganic compounds. The resident (adult plus child) RME multipathway total noncancer hazard was estimated at 1 (associated with all detections); 0.6 is attributable to ambient levels of inorganic compounds. None of the target organ HIs for a residential scenario at Site 09 subsurface soil was estimated at more than 1.
- The following risks were calculated for Site 10 surface soil. The RME multipathway total cancer risk for the industrial worker was estimated at 5×10^{-6} (associated with all detections); 4×10^{-6} is attributable to ambient levels of inorganic compounds. The resident (adult plus child) RME multipathway total cancer risk was estimated at 2×10^{-5} (associated with all detections); 2×10^{-5} is attributable to ambient levels of inorganic compounds. The RME multipathway total noncancer hazard for the industrial worker was estimated below 1, at 0.1 (associated with all detections); 0.07 is attributable to ambient levels of inorganic compounds. The resident (adult plus child) RME multipathway total noncancer hazard was estimated at 2 (associated with all detections); 0.8 is attributable to ambient levels of inorganic compounds. None of the target HIs for a residential scenario at Site 10 surface soil was estimated at more than 1.

- The following risks were calculated for Site 10 subsurface soil. The RME multipathway total cancer risk for the industrial worker was estimated at 6×10^{-6} (associated with all detections); 4×10^{-6} was attributable to ambient levels of inorganic compounds. The resident (adult plus child) RME multipathway total cancer risk was estimated at 2×10^{-5} for total risks (all detections); 2×10^{-5} was attributable to ambient levels of inorganic compounds. The RME multipathway total noncancer hazard for subsurface soil under the industrial worker scenario was estimated at 0.1 (associated with all detections); 0.08 was attributable to ambient levels of inorganic compounds. The resident (adult plus child) RME multipathway total noncancer hazard was estimated at 2 (associated with all detections); 0.9 is attributable to ambient levels of inorganic compounds. None of the target HIs for a residential scenario at Site 10 subsurface soil was estimated at more than 1.

Summary of Human Health Risks

The final RI report for Sites 09 and 10 established that all risks were acceptable or well within the risk management range (SulTech 2005). Therefore, no risk-based remedial action to protect human health is required at Sites 09 and 10.

2.7.2 Ecological Risks

A screening-level ERA for Sites 09 and 10 at NAVSTA TI was conducted following Navy policy and EPA guidance. The terrestrial habitat of NAVSTA TI is of poor quality for wildlife species because it is predominantly covered with urbanized areas. The Navy, and federal and state regulatory agencies agreed that NAVSTA TI did not contain significant habitat and should not be considered for a detailed ERA for terrestrial receptors. Groundwater discharge to the bay is a potential concern because marine ecological receptors could be affected. The screening-level ERA for Sites 09 and 10 addressed chemicals identified in groundwater at each site and the potential risk to aquatic receptors associated with migration of chemicals in groundwater to the offshore surface waters of the bay.

Contaminants reported in groundwater were compared against NAVSTA TI screening criteria. Chemicals of potential ecological concern (COPECs) identified for Site 09 included nickel, alpha-chlordane, and endosulfan II (SulTech 2005). No COPECs were identified for Site 10 (SulTech 2005). Groundwater is not of ecological concern at NAVSTA TI until it meets or becomes surface water or when it can transport dissolved chemicals into the offshore environment. The screening-level ERA for Sites 09 and 10 focused on chemicals in groundwater that have migrated to the offshore environment and are bioavailable or potentially bioavailable to aquatic receptors.

Chemicals of ecological concern (COECs) were evaluated by simulating the fate and transport of COPECs (nickel, alpha-chlordane, and endosulfan II) in groundwater to the ecological point of exposure in an analytical contaminant fate and transport model. COPECs identified at Site 09

were not determined to be COECs based on the results of fate and transport modeling (SulTech 2005). Additionally, no COECs were identified because no COPECs existed at Site 10.

Summary of Ecological Risks

Three chemicals were originally identified as COPECs (nickel, alpha-chlordane, and endosulfan II) for aquatic receptors offshore of Site 09. However, after the fate and transport of these chemicals to the ecological point of exposure at the Site 09 shoreline had been simulated, the specific chemical concentrations in groundwater decreased to levels within the limits of the screening criteria (SulTech 2005). Therefore, COECs were not identified at either Sites 09 or 10.

In conclusion, groundwater at Sites 09 and 10 does not pose an unacceptable risk to aquatic biota offshore of NAVSTA TI.

Basis for No Action Decision

The results of the HHRA and the ERA indicate that concentrations of hazardous substances in soil and groundwater at Sites 09 and 10 do not present an unacceptable risk. Therefore, the no remedial action decision is protective of human health, welfare, and the environment.

2.8 DOCUMENTATION OF SIGNIFICANT CHANGES

The proposed plan for Sites 09 and 10 was released for public comment on September 29, 2006, and identified 'no action' as the proposed decision for these sites. The public comment period commenced on September 29, 2006, and ended October 31, 2006. In addition, a community meeting was held on October 17, 2006. No comments were submitted at the public meeting, and none were received by U.S. mail and/or electronic mail (email) during the public comment period. Therefore, the Navy and regulatory agencies concluded that no significant changes to the no action decision, as originally identified in the proposed plan, were necessary or appropriate.

3.0 RESPONSIVENESS SUMMARY

In preparing this responsiveness summary, the Navy followed "A Guide to Preparing Superfund Proposal Plans, Records of Decisions, and Other Remedy Selection Documents" (EPA 1999). A responsiveness summary summarizes the views of the public and support agencies, and documents in the record how public comments are integrated into the remedial decision. The guidance suggests that the responsiveness summary be organized into two sections:

"Stakeholder Issues and Lead Agency Responses: Summarize and respond concisely to major issues raised by stakeholders (for example, community groups, support agencies, businesses, municipalities, and potentially responsible parties [PRP])."

"Technical and Legal Issues, if necessary" (EPA 1999).

The following sections discuss how public comments were solicited during the public comment period and summarize any stakeholder, technical, or legal issues identified in this process.

3.1 OVERVIEW AND BACKGROUND ON COMMUNITY INVOLVEMENT

The proposed plan for Sites 09 and 10 was released for public comment on September 29, 2006, thereby initiating the 30-day public comment period. A copy of the newspaper notice that announced the public comment period and the location and time of the public meeting is included in Appendix C. The public meeting for the proposed plan for Sites 09 and 10 was held on October 17, 2006, in the Casa de la Vista, Building 271, at Treasure Island, California. The public comment period ran from September 29, 2006, through October 31, 2006. No comments were submitted at the public meeting, and none were received by U.S. mail/email during the public comment period (Appendix E).

The proposed plan presented a no action decision for soils and groundwater at Sites 09 and 10 (SulTech 2006). Federal and state regulatory agencies concur with the no action proposed plan. The purpose of the proposed plan and the public meeting was to provide the public with a concise summary of the site investigation and information used to support the Navy's preferred alternative. A transcript of the public meeting and an attendance roster are included in Appendix C.

3.2 STAKEHOLDER ISSUES AND NAVY RESPONSES

No comments were received from citizens or support agencies during the public comment period. Therefore, the Navy has concluded there are no identified stakeholder issues and no need for a written response or a separate point-by-point response document. Because no comments were received, the Navy and DTSC believe there is sufficient basis to proceed with a no action decision for Sites 09 and 10.

3.3 TECHNICAL AND LEGAL ISSUES

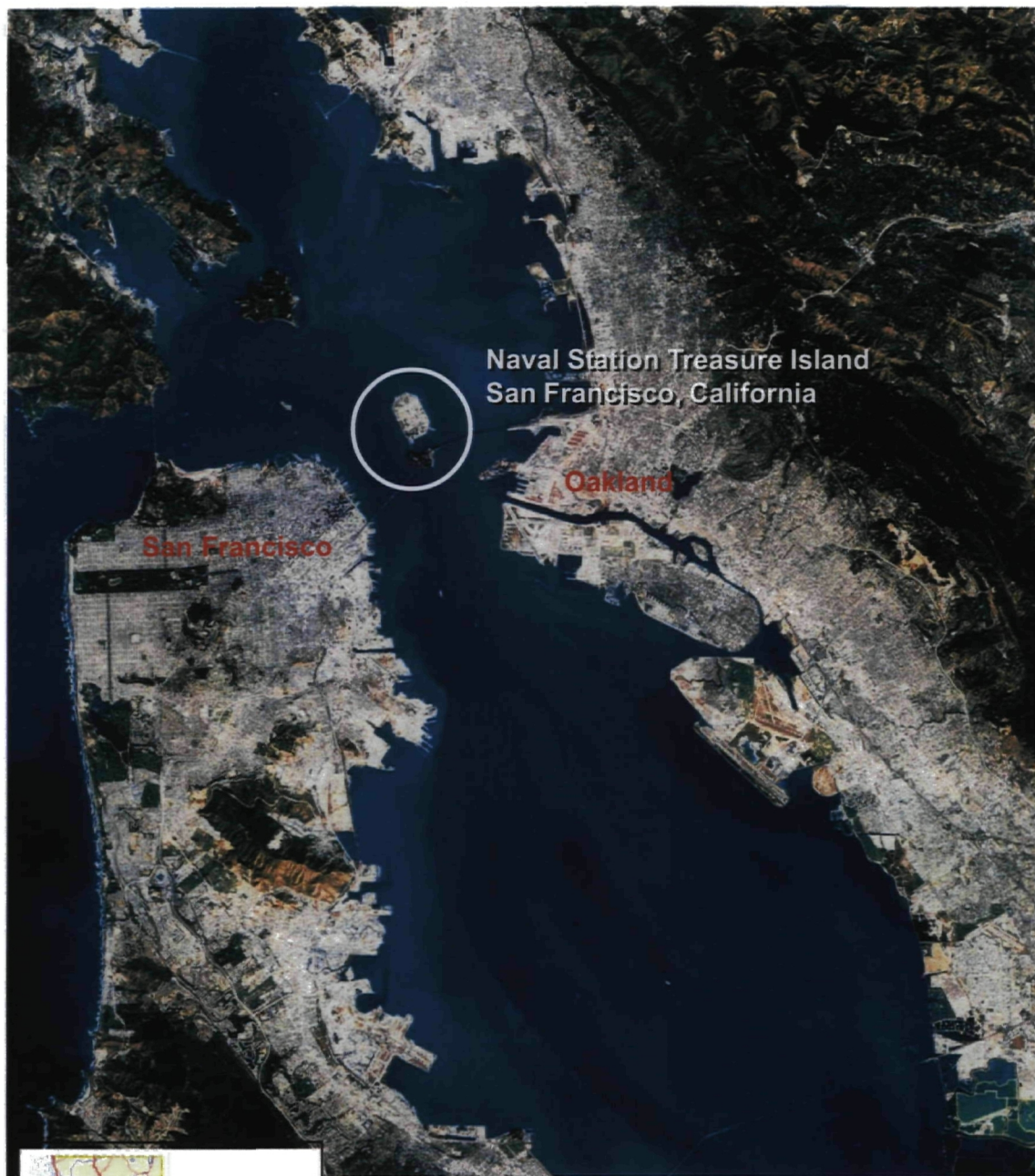
There are no outstanding technical or legal issues for this ROD. The Navy and DTSC believe there is sufficient technical and legal basis to proceed with a no action decision for Sites 09 and 10.

4.0 REFERENCES

- City and County of San Francisco (CCSF). 1996. "Naval Station Treasure Island Reuse Plan - Public Review Draft." Prepared for the Office of Military Base Conversion, Planning Department, CCSF, and the San Francisco Redevelopment Agency. June 3.
- Dames and Moore. 1988. "Final Preliminary Assessment/Site Inspection (PA/SI)." Prepared for the Department of the Navy, Western Division, Naval Facilities Engineering Command, Contract Number N62474-85-C-3385.
- DTSC. 1997. "Selecting Inorganic Constituents as Chemicals of Potential Concern at Risk Assessments at Hazardous Waste Sites and Permitted Facilities." Final Policy. Human and Ecological Risk Division, Department of Toxic Substances Control, California Environmental Protection Agency. February.
- ERM-West, Inc. 1995. "Base-wide Environmental Baseline Survey Report, Naval Station Treasure Island." Prepared for the Department of the Navy, Engineering Field Activity West, Naval Facilities Engineering Command. May.
- PRC Environmental Management, Inc. (PRC). 1997. "Draft Final Onshore Remedial Investigation Report, Naval Station Treasure Island, San Francisco, California." Department of the Navy, Naval Facilities Engineering Command, Engineering Field Activity West. September.
- Regional Water Quality Control Board (Water Board). 1996. "San Francisco and Northern San Mateo County Pilot Beneficial Use Designation Project Part I: Draft Staff Report." Water Board Groundwater Committee. April 4.
- Shaw Environmental, Inc. 2006. "Final Technical Memorandum Dioxin Trenching Investigation, Sites 10, 14/22, and 32, Naval Station Treasure Island, San Francisco, California." March 20.
- State Water Resources Control Board (SWRCB). 1988. "Sources of Drinking Water." Resolution 88-63. May.
- SulTech. 2004. "Revised Draft Human Health Risk Assessment for Installation Restoration Sites 09 And 10, Naval Station Treasure Island, San Francisco, California." August.
- SulTech. 2005. "Final Remedial Investigation Report for Installation Restoration Sites 09 and 10, Naval Station Treasure Island, San Francisco, California." Department of the Navy, Southwest Division, Naval Facilities Engineering Command. March.
- SulTech. 2006. "Proposed Plan Installation Restoration Site 09, Former Foundry and Site 10, Former Bus Painting Shop, Naval Station Treasure Island." September 29.
- Tetra Tech EM Inc. (Tetra Tech). 2002. "Final Community Relations Plan. Naval Station Treasure Island, San Francisco, California." June 28.
- Tetra Tech. 2003. "Draft Remedial Investigation Report for Installation Restoration Sites 09 and 10, Naval Station Treasure Island, San Francisco, California." Department of the Navy, Southwest Division, Naval Facilities Engineering Command. July.

- Tetra Tech. 2006. "Final Community Relations Plan 2006 Update. Naval Station Treasure Island, San Francisco, California." July 21.
- U.S. Environmental Protection Agency (EPA). 1989. "Risk Assessment Guidance for Superfund, Volume I: Human Health Evaluation Manual (Part A)," Interim Final. EPA/540/1-89/002. Office of Emergency and Remedial Response. December.
- EPA. 1999. "Guide to Preparing Superfund Proposal Plans, Records of Decisions, and Other Remedy Selection Documents. Office of Solid Waste and Emergency Response (OSWER) Directive 9200.1-23P. EPA 540-R-96-031." July.
- EPA. 2002a. "EPA Region IX Preliminary Remediation Goals (PRG) 2002." Region IX PRGs Table 2002 Update, Including Memorandum from Stanford Smucker, EPA Region IX Regional Toxicologist, to PRG Table Users. October 1. Available online at <http://www.epa.gov/region09/waste/sfund/prg/>.
- EPA. 2002b. "Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites." OSWER 9285.6-10. Office of Emergency and Remedial Response. December.
- U.S. Department of the Navy (Navy). 1992. Federal Facility Site Remediation Agreement (FFSRA). With the State of California for Naval Station Treasure Island. September 29.
- Navy. 2001. Memorandum Regarding Conducting Human Health Risk Assessments Under the Environmental Restoration Program. From William G. Mattheis, Deputy Director, Environmental Protection, Safety and Occupational Health Division. To Commander, Naval Facilities Engineering Command. February 12.

FIGURES



Not To Scale



NAVAL STATION TREASURE ISLAND, CALIFORNIA
U.S. NAVY SOUTHWEST DIVISION NAVFAC, SAN DIEGO

FIGURE 1-1
Naval Station Treasure Island
Location Map



Not To Scale



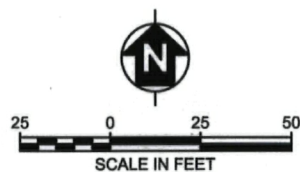
NAVAL STATION TREASURE ISLAND, CALIFORNIA
U.S. NAVY SOUTHWEST DIVISION NAVFAC, SAN DIEGO

FIGURE 1-2
Aerial Photograph of Treasure Island



LEGEND

- FRESHWATER LINE
- SANITARY SEWER LINE
- STORM SEWER LINE
- STORM DRAIN CATCH BASIN
- x — FENCE
- BUILDING
- - - SITE BOUNDARY



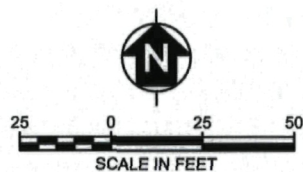
NAVAL STATION TREASURE ISLAND, CALIFORNIA
U.S. NAVY SOUTHWEST DIVISION NAVFAC, SAN DIEGO

FIGURE 1-3
Site 09 - Former Foundry



LEGEND

- FRESHWATER LINE
- SANITARY SEWER LINE
- STORM SEWER LINE
- STORM DRAIN CATCH BASIN
- X — FENCE
- BUILDING
- - - SITE BOUNDARY



NAVAL STATION TREASURE ISLAND, CALIFORNIA
U.S. NAVY SOUTHWEST DIVISION NAVFAC, SAN DIEGO

FIGURE 1-4
Site 10 - Former Bus Painting Shop

TABLES

TABLE 2-1: CANCER RISK AND NONCANCER HAZARD INDEX SUMMARY FOR SITE 09: REASONABLE MAXIMUM EXPOSURE

Sites 09 and 10 Record of Decision, NAVSTA Treasure Island

Incremental Risk										
Reasonable Maximum Exposure	CANCER RISK					NONCANCER HAZARD				
Exposure Pathway	Current Industrial Worker	Future Industrial Worker	Future Construction Worker	Future Resident (Adult + Child)	Future Intrusive Resident (Adult + Child)	Current Industrial Worker	Future Industrial Worker	Future Construction Worker	Future Resident (Child)	Future Intrusive Resident (Child)
Soil Exposure Pathways										
Soil Ingestion	3.00E-07	7.00E-07	9.00E-08	1.00E-06	3.00E-06	--	4.00E-02	1.00E-01	--	5.00E-01
Dermal Contact with Soil	2.00E-07	7.00E-07	4.00E-08	5.00E-07	1.00E-06	--	--	--	--	--
Inhalation of Particulates Released from Soil to Outdoor Air	4.00E-11	1.00E-10	4.00E-12	8.00E-11	2.00E-10	--	--	--	--	--
Multipathway Total	5.00E-07	1.00E-06	1.00E-07	2.00E-06	4.00E-06	0.00E+00	4.00E-02	1.00E-01	0.00E+00	5.00E-01
Total Risk										
Reasonable Maximum Exposure	CANCER RISK					NONCANCER HAZARD				
Exposure Pathway	Current Industrial Worker	Future Industrial Worker	Future Resident	Future Intrusive Resident		Current Industrial Worker	Future Industrial Worker	Future Resident	Future Intrusive Resident	
Soil Exposure Pathways										
Detected Analytes without Ambient Inorganics	9.00E-07	2.00E-06	3.00E-06	6.00E-06		5.00E-02	5.00E-02	7.00E-01	5.00E-01	
Ambient Inorganics	6.00E-06	3.00E-06	2.00E-05	1.00E-05		8.00E-02	5.00E-02	9.00E-01	6.00E-01	
Multipathway Total	7.00E-06	5.00E-06	3.00E-05	2.00E-05		1.00E-01	1.00E-01	2.00E+00	1.00E+00	

Note:

Because cancer risks are calculated over a lifetime, both adult and childhood exposures are combined in this table to present a lifetime cancer risk. For noncancer hazards, exposures are predicted to result in a health effect only during the time when exposure is occurring. For this reason, child hazard indices are greater than adult hazard indices, and thus, only the child's noncancer hazard is shown here.

TABLE 2-2: CANCER RISK AND NONCANCER HAZARD INDEX SUMMARY FOR SITE 10: REASONABLE MAXIMUM EXPOSURE

Sites 09 and 10 Record of Decision, NAVSTA Treasure Island

Incremental Risk										
Reasonable Maximum Exposure	CANCER RISK					NONCANCER HAZARD				
Exposure Pathway	Current Industrial Worker	Future Industrial Worker	Future Construction Worker	Future Resident (Adult + Child)	Future Intrusive Resident (Adult + Child)	Current Industrial Worker	Future Industrial Worker	Future Construction Worker	Future Resident (Child)	Future Intrusive Resident (Child)
Soil Exposure Pathways										
Soil Ingestion	2.00E-07	8.00E-07	1.00E-07	7.00E-07	3.00E-06	--	5.00E-02	2.00E-01	--	6.00E-01
Dermal Contact with Soil	2.00E-07	7.00E-07	4.00E-08	3.00E-07	2.00E-06	--	--	--	--	--
Inhalation of Particulates Released from Soil to Outdoor Air	2.00E-11	1.00E-10	5.00E-12	5.00E-11	2.00E-10	--	--	--	--	--
Multipathway Total	3.00E-07	1.00E-06	1.00E-07	1.00E-06	5.00E-06	0.00E+00	5.00E-02	2.00E-01	0.00E+00	6.00E-01
Total Risk										
Reasonable Maximum Exposure	CANCER RISK					NONCANCER HAZARD				
Exposure Pathway	Current Industrial Worker	Future Industrial Worker	Future Resident	Future Intrusive Resident		Current Industrial Worker	Future Industrial Worker	Future Resident	Future Intrusive Resident	
Soil Exposure Pathways										
Detected Analytes without Ambient										
Inorganics	9.00E-07	2.00E-06	3.00E-06	7.00E-06		5.00E-02	5.00E-02	6.00E-01	6.00E-01	
Ambient Inorganics	4.00E-06	4.00E-06	2.00E-05	2.00E-05		7.00E-02	8.00E-02	8.00E-01	9.00E-01	
Multipathway Total	5.00E-06	6.00E-06	2.00E-05	2.00E-05		1.00E-01	1.00E-01	2.00E+00	2.00E+00	

Note:

Because cancer risks are calculated over a lifetime, both adult and childhood exposures are combined in this table to present a lifetime cancer risk. For noncancer hazards, exposures are predicted to result in a health effect only during the time when exposure is occurring. For this reason, child hazard indices are greater than adult hazard indices, and thus, only the child's noncancer hazard is shown here.

APPENDIX A
STATEMENT OF REASONS

APPENDIX A

STATEMENT OF REASONS SITE 09, FORMER FOUNDRY AND SITE 10, FORMER BUS PAINTING SHOP NAVAL STATION TREASURE ISLAND RECORD OF DECISION

The U.S. Department of the Navy has prepared this statement of reasons in compliance with California Health and Safety Code (HSC) Section (§) 25356.1. This statement of reasons is part of the record of decision (ROD) for Installation Restoration (IR) Site 09, Former Foundry, and Site 10, Former Bus Painting Shop, at Naval Station (NAVSTA) Treasure Island (TI). It is the Navy's intent that this document meets the requirements of Section 25356.1, which is a state requirement for remedial action plans at remedial sites. However, for the purpose of the ROD, HSC Section 25356.1 is not considered an applicable or relevant and appropriate requirement (ARAR).

The ROD presents a summary of the remedial investigation (RI) to address concentrations of contaminants of potential concern (COPC) in soil at Sites 09 and 10, including iron, benzo(a)pyrene, and dibenz(a,h)anthracene. No COPCs were identified for groundwater at either site. The ROD summarizes the results of a baseline human health risk assessment (HHRA) and a screening-level ecological risk assessment (ERA) to evaluate the potential risks to public health and the environment.

Based on the information and data evaluated as part of the RI for Sites 09 and 10, soil and groundwater do not pose unacceptable human health or ecological risks. Therefore, the Navy has concluded that no Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) action is necessary to protect public health or welfare or the environment. This ROD sets forth the no action decision under CERCLA for Site 09, Former Foundry, and Site 10, Former Bus Painting Shop, at NAVSTA TI.

HSC § 25356.1(c) requires a statement of reasons that sets forth the basis for the selected remedial action and an evaluation of the consistency of the remedial action with the federal regulations and six specific factors contained in HSC § 25356.1(d). The ROD describes how the remedy selected is consistent with CERCLA, the Superfund Amendments and Reauthorization Act (SARA), and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). The attached ROD complies with the law as specified in HSC § 25356.1. This appendix describes how the remedy is consistent with the six factors required by HSC § 25356.1(d). In addition, HSC § 25356.1(e) requires that the preliminary nonbinding allocation of responsibility (NBAR) be presented. The NBAR is presented after the discussion of the six factors outlined in HSC § 25356.1(d).

1. Health and Safety Risks — Section 25356.1(d)(1)

Site 09, Former Foundry

Site 09, Former Foundry, includes 11,000 square feet in the southern end of NAVSTA TI and includes Building 41 (the former foundry) and the paved area immediately adjacent to the northwest, south, and west sides of the building. Building 41 has been used for multiple purposes since the early 1940s, including a forge and foundry, a paint shop, a vehicle maintenance shop, a welding training school, a small boat maintenance shop, a wood shop for building movie sets, and a storage building for oil spill containment equipment. The building is currently vacant.

An HHRA was completed in 2004 based on basewide groundwater monitoring data from phase I and phase II of the RI, as well as additional RI data collected from IR sites from 1994 through 2002 (SulTech 2004). The HHRA was revised in 2005 to incorporate California Environmental Protection Agency (Cal EPA) Department of Toxic Substances Control (DTSC) guidelines and the Navy September 2003 dual-tracking risk assessment guidance (SulTech 2005).

Because groundwater at Site 09 is not a source of municipal or domestic drinking water, potential exposure to chemicals in groundwater would occur only through inhalation of volatile compounds migrating upward into the air (breathing zone). For this reason, only volatile organic compounds (VOC) were evaluated to determine whether any VOCs could be considered COPCs in groundwater (SulTech 2004). VOCs detected in groundwater were identified as COPCs if the maximum detected concentration exceeded the risk-based screening levels for vapor intrusion to indoor air detailed by EPA (EPA 2002). Based on this screening, no COPCs were identified for groundwater at Site 09. COPCs identified in soil at Site 09 included iron, benzo(a)pyrene, and dibenz(a,h)anthracene.

The following incremental risks to human health were calculated for Site 09:

- The current industrial worker reasonable maximum exposure (RME) multipathway cancer risk was 5×10^{-7} .
- The future industrial worker RME multipathway cancer risk was 1×10^{-6} .
- The future construction worker RME multipathway cancer risk was 1×10^{-7} .
- The future resident (adult plus child) multipathway cancer risk was 2×10^{-6} .
- The future intrusive resident (adult plus child) multipathway cancer risk was 4×10^{-6} .
- The noncancer hazard index (HI) for the same risk scenarios was less than 1.

The most significant exposure pathways at Site 09 are dermal contact and soil ingestion for the future resident scenario. Results for multiple pathway risk fall within the target risk range for this scenario and for the industrial worker scenario as well.

Site 10, Former Bus Painting Shop

Site 10, Former Bus Painting Shop, includes 32,000 square feet in the northeastern section of NAVSTA TI, north of 13th Street, between Avenue N and the island shoreline. Site 10 includes Building 335 (the former bus painting shop) and the area immediately surrounding the building. Building 335 was built during the mid-1940s. It was used throughout the years as a bus painting shop, a paint mixing facility, and a building where pesticides and chlorinated herbicides were mixed and handled. At one time, it reportedly contained a self-service steam rack used to clean vehicles, drums, garbage cans, and related equipment. Currently, the building and surrounding area are leased by a local landscaping contractor for equipment storage and staging, as well as for a wood-chipping area.

Because groundwater at Site 10 is not a source of municipal or domestic drinking water, potential exposure to chemicals in groundwater would occur only through the inhalation of volatile compounds migrating upward into the air (breathing zone). For this reason, only VOCs were evaluated to determine whether they could be considered COPCs in groundwater (SulTech 2004). VOCs detected in groundwater were identified as COPCs if the maximum detected concentration exceeded the risk-based screening levels for vapor intrusion to indoor air detailed by EPA (EPA 2002). Based on this screening, no COPCs were identified for groundwater at Site 10. COPCs identified in soil at Site 10 included iron, benzo(a)pyrene, and dibenz(a,h)anthracene.

The following incremental risks were calculated for Site 10:

- The current industrial worker RME multipathway cancer risk was 3×10^{-7} .
- The future industrial worker RME multipathway cancer risk was 1×10^{-6} .
- The future construction worker RME multipathway cancer risk was 1×10^{-7} .
- The future resident (adult plus child) multipathway cancer risk was 1×10^{-6} .
- The future intrusive resident (adult plus child) multipathway cancer risk was 5×10^{-6} .
- The noncancer HI for the same risk scenarios was less than 1.

The most significant exposure pathways at Site 10 are dermal contact and soil ingestion for the future resident scenario. Results for multiple pathway results fall within the target risk range for this scenario and for the industrial worker scenario as well.

2. Beneficial Uses of Site Resources — Section 25356.1(d)(2)

In 1993, NAVSTA TI was designated for closure under the Base Closure and Realignment Act of 1990. The base was closed on September 30, 1997, and is currently in the transfer process. Potential future land use is discussed below.

According to the draft 1996 reuse plan, the reuse for the area that includes Site 09 is designated as a film production/conference center. This reuse includes land that could be used for publicly oriented recreation/cultural/entertainment and specifically as a film/events district. The reuse for the area that includes Site 10 is designated as residential/open space/publicly oriented uses. This reuse includes land designated for institutional use, specifically as a public facilities district. Residential housing may be associated with the proposed reuse at both Sites 09 and 10.

As part of the November 1995 groundwater sampling event, groundwater samples from all 86 wells at NAVSTA TI were analyzed for total dissolved solids (TDS). Using the TDS criterion of 3,000 milligrams per liter (mg/L) to define potential sources of drinking water as described by the State Water Resources Control Board (SWRCB), Resolution No. 88-63, potentially suitable drinking water at NAVSTA TI exists from the water table surface to an estimated depth of 33 feet below ground surface (bgs).

The minimum production criterion to define potential sources of drinking water is a well yield of more than 200 gallons per day (SWRCB 1988). Pump tests, well development rates, and hydraulic conductivity values from slug testing (5 to 16 feet per day) indicate wells at NAVSTA TI can yield more than 200 gallons per day.

Under the Bay Basin water quality control plan (Basin Plan), all groundwater within the Bay Basin that meets the criteria of SWRCB Resolution No. 88-63 has a potential beneficial use for municipal or domestic supply (SWRCB 1988). The California Regional Water Quality Control Board (Water Board), however, completed a pilot beneficial use designation project for several groundwater basins in San Francisco and northern San Mateo Counties, including NAVSTA TI and Yerba Buena Island (YBI) (Water Board 1996). The report indicated that the use of groundwater for municipal and domestic supply at NAVSTA TI would be limited by (1) the small volume of fresh groundwater available, (2) the likelihood of saltwater intrusion, and (3) potential future ground improvements for stability (stone columns and dynamic compaction). Consequently, the report recommended that the Basin Plan be revised so that groundwater at NAVSTA TI is no longer designated as a potential municipal or domestic water supply but that the designation as potential agricultural, process, and industrial supply be retained. These recommendations apply to current and future use of groundwater resources at Sites 09 and 10 at NAVSTA TI.

3. Effect of the Remedial Actions on Groundwater Resources — Section 25356.1(d)(3)

No remedial actions are necessary for groundwater at Sites 09 and 10 because none of the chemicals in groundwater poses an unacceptable risk. In addition, the pilot beneficial use

designation project recommended that the Bay Basin water quality control plan be revised so that groundwater at NAVSTA TI is no longer designated as a potential municipal or domestic water supply but that the designation as potential agricultural, process, and industrial supply be retained. These recommendations apply to current and future use of resources at Sites 09 and 10 at NAVSTA TI.

4. Site-Specific Characteristics — Section 25356.1(d)(4)

NAVSTA TI lies in the San Francisco Bay, midway between San Francisco and Oakland, California, and consists of two contiguous islands: TI and Yerba Buena Island (YBI). Sites 09 and 10, located on TI, are former industrial facilities that provided various types of naval support. Characteristics of Sites 09 and 10 related to soils and hydrogeology are provided below.

With the exception of the area covered by Building 41, all of Site 09 is paved with asphalt and underlain by sandy dredge fill. The sandy fill consists of tan to grayish-brown, fine- to coarse-grained, angular sand with some pea-size gravel. Minor silt and clay lenses are scattered throughout the sand, and shell fragments can locally range from minor to abundant. Native formations such as the Bay Mud were not encountered in the shallow borings. Groundwater at Site 09 was encountered at approximately 7 feet bgs during the 2002 sampling event. Based on general NAVSTA TI hydrogeology and basewide groundwater monitoring data, groundwater at Site 09 flows to the south and southeast, toward the shoreline.

The geology of Site 10 is similar to Site 09 except that the surface material varies throughout the site. The surface material on the northern and eastern sides of the building consists of a combination of soil, gravel, and wood chips because of the landscaping taking place at the site. The western and southern sides of Building 335 are mostly covered by asphalt. The asphalt is underlain by sandy dredge fill. The sandy fill consists of relatively permeable sands with interbedded clays and silts. Native formations such as the Bay Mud were not encountered in the shallow borings. Groundwater at Site 10 was encountered at approximately 7 feet bgs during the 2002 sampling event. Based on general TI hydrogeology and basewide groundwater monitoring and flow data, groundwater at Site 10 likely flows to the northeast, toward the shoreline.

Groundwater is not of ecological concern at NAVSTA TI until it meets or becomes surface water or when it can transport dissolved chemicals into the offshore environment. Contaminants of ecological concern (COEC) were evaluated by simulating the fate and transport of chemicals of potential ecological concern (COPEC) in groundwater to the ecological point of exposure in an analytical contaminant fate and transport model. COPECs identified at Site 09 (including nickel, alpha-chlordane, and endosulfan II) were not determined to be COECs based on the results of fate and transport modeling (SulTech 2005). Additionally, no COECs were identified because no COPECs existed at Site 10.

5. Cost Effectiveness of Alternative Remedial Action Measures — Section 25356.1(d)(5)

This statement of reasons presents the basis for the no action decision for Site 09, Former Foundry, and Site 10, Former Bus Painting Shop, at NAVSTA TI. The no action decision was made in accordance with CERCLA, as amended by SARA (1986), and the NCP. The cost associated with the CERCLA no action decision is assumed to be zero. A comparative analysis of various remedial action measures was therefore not completed and is not applicable for this statement of reasons.

6. Potential Environmental Impacts of Remedial Actions — Section 25356.1(d)(6)

This statement of reasons documents the no action decision for Site 09, Former Foundry, and Site 10, Former Bus Painting Shop, at NAVSTA TI. No environmental impact is associated with the no action decision.

Preliminary Non-Binding Allocation of Financial Responsibility

HSC § 25356.1(e) requires DTSC to prepare an NBAR among all identifiable potentially responsible parties (PRP). HSC § 25356.3(a) allows PRPs with an aggregate allocation in excess of 50 percent to convene an arbitration proceeding by submitting to binding arbitration before an arbitration panel. If PRPs with more than 50 percent of the allocation convene arbitration, then any other PRP wishing to do so may also submit to binding arbitration.

The sole purpose of the NBAR is to establish the PRPs that will have an aggregate allocation in excess of 50 percent and can therefore convene arbitration if they choose. The NBAR, which is based on the evidence available to DTSC, is not binding to anyone, including PRPs, DTSC, or the arbitration panel. If a panel is convened, its proceedings are *de novo* and do not constitute a review of the provisional allocation. The arbitration panel's allocation will be based on the panel's application of the criteria outlined in HSC § 25356.1(c) to the evidence produced at the arbitration hearing. Once arbitration is convened, or waived, the NBAR has no further effect, in arbitration, litigation, or any other proceeding, except that both the NBAR and the arbitration panel's allocation are admissible in a court of law, pursuant to HSC § 25356.7 for the sole purpose of showing the good faith of the parties who have discharged the arbitration panel's decision.

The DTSC sets forth the following preliminary NBAR for NAVSTA TI Site 09, Former Foundry and Site 10, Former Bus Painting Shop:

NAVSTA TI Site 09, Former Foundry, and Site 10, Former Bus Painting Shop, are located on Navy property. The Navy is 100 percent responsible for the investigation and cleanup activities solely related to NAVSTA TI past practices during the period of Navy ownership.

REFERENCES

- California Regional Water Quality Control Board (Water Board). 1996. "San Francisco and Northern San Mateo County Pilot Beneficial Use Designation Project Part I: Draft Staff Report." Water Board Groundwater Committee. April 4.
- State Water Resources Control Board (SWRCB). 1988. "Sources of Drinking Water." Resolution 88-63. May.
- SulTech. 2004. "Revised Draft Human Health Risk Assessment for Installation Restoration Sites 09 And 10, Naval Station Treasure Island, San Francisco, California." August.
- SulTech. 2005. "Final Remedial Investigation Report for Installation Restoration Sites 09 and 10, Naval Station Treasure Island, San Francisco, California." Department of the Navy, Southwest Division, Naval Facilities Engineering Command. March.
- U.S. Environmental Protection Agency (EPA). 2002. "Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils (Subsurface Vapor Intrusion Guidance)." Draft. *Federal Register*: November 29, 2002, Volume 67, Number 230, pages 71169-71172. Also available online at <http://www.epa.gov/correctiveaction/eis/vapor.htm>.

APPENDIX B
ADMINISTRATIVE RECORD INDEX

APPENDIX B

ADMINISTRATIVE RECORD INDEX

- City and County of San Francisco (CCSF). 1996. "Naval Station Treasure Island Reuse Plan — Public Review Draft." Prepared for the Office of Military Base Conversion, Planning Department, CCSF, and the San Francisco Redevelopment Agency. June 3.
- Dames and Moore. 1988. "Final Preliminary Assessment/Site Inspection of Naval Station Treasure Island." Prepared for the Naval Energy and Environmental Support Activity. April.
- Geomatrix. 1990. "Perimeter Dike Stability Evaluation (Volume I); Compilation of Data and Information for Evaluation (Volume 4); Evaluation of Interior Area Performance (Volume 5), Naval Station Treasure Island, San Francisco, California." Prepared for the Department of the Navy, Western Division, Naval Facilities Engineering Command. August/October.
- Mare Island Naval Shipyard (MINS) BRAC Environmental Division. 1996. "Historical Study of Yerba Buena Island, Treasure Island, and their Buildings." Revision 1. March.
- PRC Environmental Management, Inc (PRC). 1995. "Phase IIA Remedial Investigation, Tidal Influence Study Summary of Results, Naval Station Treasure Island, San Francisco, California." Department of the Navy, Western Division, Naval Facilities Engineering Command. December 1.
- PRC. 1996a. "Groundwater Status Report: Summary of Groundwater Monitoring from November 1994 to November 1995, Naval Station Treasure Island." Engineering Field Activity West, Naval Facilities Engineering Command. May 31.
- PRC. 1996b. "Technical Memorandum Estimation of Background and Ambient Metal Concentrations in Soils, Naval Station Treasure Island, San Francisco, California." June.
- PRC. 1997a. "Final Groundwater Status Report: Summary of Groundwater Monitoring from November 1995 to September 1996, Naval Station Treasure Island, San Francisco, California." Department of the Navy, Naval Facilities Engineering Command, Engineering Field Activity West. May 23.
- PRC. 1997b. "Draft Final Onshore Remedial Investigation Report, Naval Station Treasure Island, San Francisco, California." Department of the Navy, Naval Facilities Engineering Command, Engineering Field Activity West. September.
- Regional Water Quality Control Board (Water Board). 1996. "San Francisco and Northern San Mateo County Pilot Beneficial Use Designation Project Part I: Draft Staff Report." Water Board Groundwater Committee. April 4.

- Water Board. 1995. "San Francisco Bay Basin Plan." San Francisco Bay Region. June 21.
- Water Board. 1998. "Recommended Interim Water Quality Objectives (or Aquatic Life Criteria) for Methyl Tertiary-Butyl Ether (MTBE)." San Francisco Bay Region. Memorandum from Stephen Morse, Chief of Toxics Cleanup Division, to Toxics Cleanup Division staff, Interested Parties. October 1.
- Water Board. 2000. "A Compilation of Water Quality Goals." Central Valley Region. August.
- State Water Resources Control Board (SWRCB). 1988. "Sources of Drinking Water." Resolution 88-63. May.
- SulTech. 2004. "Revised Draft Human Health Risk Assessment for Installation Restoration Sites 09 And 10, Naval Station Treasure Island, San Francisco, California." August.
- SulTech. 2005. "Final Remedial Investigation Report for Installation Restoration Sites 09 and 10, Naval Station Treasure Island, San Francisco, California." Department of the Navy, Southwest Division, Naval Facilities Engineering Command. March.
- SulTech. 2006. "Proposed Plan Installation Restoration Site 09, Former Foundry and Site 10, Former Bus Painting Shop, Naval Station Treasure Island." September 29.
- Tetra Tech EM Inc. (Tetra Tech). 1999a. "Groundwater Status Report: Summary of Groundwater Monitoring from January to November 1998, Naval Station Treasure Island, San Francisco, California." Department of the Navy, Naval Facilities Engineering Command. May 7.
- Tetra Tech. 1999b. "Draft Remedial Investigation Report, Site 12 Operable Unit, Naval Station Treasure Island, San Francisco, California." Department of the Navy, Southwest Division, Naval Facilities Engineering Command. June 1.
- Tetra Tech. 2001a. "Final Technical Memorandum Estimation of Ambient Concentrations of Metals in Groundwater, Naval Station Treasure Island, San Francisco, California." March.
- Tetra Tech. 2001b. "Final Preliminary Remediation Criteria for Petroleum and Petroleum Constituents, Technical Memorandum, Naval Station Treasure Island, San Francisco, California." November.
- Tetra Tech. 2002a. "Final Field Sampling Plan, Additional Sampling at Corrective Action Plan Sites 04/19, 06, 14/22, 15, 16, 20, and 25, Naval Station Treasure Island, San Francisco, California." Department of the Navy, Southwest Division, Naval Facilities Engineering Command. February 15.

- Tetra Tech. 2002b. "Final, Interim Groundwater Monitoring Report: Groundwater Monitoring from May to August 2001, Naval Station Treasure Island, San Francisco, California." Department of the Navy, Southwest Division, Naval Facilities Engineering Command. March 27.
- Tetra Tech. 2002c. "Final Groundwater Status Report: Summary of Groundwater Monitoring from March to October 2000" Naval Station Treasure Island, San Francisco, California." Department of the Navy, Southwest Division, Naval Facilities Engineering Command. March 28.
- Tetra Tech. 2002d. "Final Tidal Mixing Zone Technical Memorandum, Naval Station Treasure Island, San Francisco, California." April 11.
- Tetra Tech. 2002e. "Final Sampling and Analysis Plan (Field Sampling Plan/Quality Assurance Project Plan) for Additional Investigation of Onshore Installation Restoration Sites 09 and 10, Naval Station Treasure Island, San Francisco, California." July.
- Tetra Tech. 2003a. "Draft Groundwater Status Report: Summary of Groundwater Monitoring from May 2001 through August 2002, Naval Station Treasure Island, San Francisco, California." February.
- Tetra Tech. 2003b. "Draft Facilitywide Underground Storage Tank Summary Report, Naval Station Treasure Island, San Francisco, California." Department of the Navy, Southwest Division, Naval Facilities Engineering Command. April.
- Tetra Tech. 2003c. "Draft Remedial Investigation Report for Installation Restoration Sites 09 and 10, Naval Station Treasure Island, San Francisco, California." Department of the Navy, Southwest Division, Naval Facilities Engineering Command. July.
- Tetra Tech and Uribe and Associates (Uribe). 1997. "Environmental Baseline Survey Sampling and Analysis Summary Report." November.
- U.S. Department of the Navy (Navy). 1987. "Draft Environmental Impact Statement for Battleship/Battlegroup/Cruiser Destroyer Group Homeporting." San Francisco, California.
- Navy. 1988. "Master Plan for the Naval Station Treasure Island, San Francisco, California." Western Division, Naval Facilities Engineering Command. November.
- Navy. 1992. Federal Facility Site Remediation Agreement (FFSRA). With the State of California for Naval Station Treasure Island. September 29.
- Navy. 1999. "Navy Interim Policy for Conducting Ecological Risk Assessment."

- Navy. 2001. Memorandum Regarding Conducting Human Health Risk Assessments under the Environmental Restoration Program. From William G. Mattheis, Deputy Director, Environmental Protection, Safety and Occupational Health Division. To Commander, Naval Facilities Engineering Command. February 12.
- Navy. 2002. "Use of California Toxicity Values in CERCLA Human Health Risk Assessments." Environmental Work Instruction 3EN.10. SWDIV EW1#10. February.
- U.S. Environmental Protection Agency (EPA). 1988. "Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA." Interim Final. Office of Emergency and Remedial Response. October.
- EPA. 1989. "Risk Assessment Guidance for Superfund, Volume I: Human Health Evaluation Manual (Part A), Interim Final." EPA/540/1-89/002. Office of Emergency and Remedial Response. December.
- EPA. 1996. "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (SW-846), Update III." Office of Solid Waste and Emergency Response. Washington, DC. December.
- EPA. 1997a. "Health Effects Assessment Summary Tables." EPA/540/R-97/036. Office of Research and Development. July.
- EPA. 1997b. "Ecological Risk Assessment Guidance for Superfund: Process for Designing and Conducting Ecological Risk Assessments, Interim Final." Environmental Response Team, Edison, New Jersey.
- EPA. 1999. "U.S. EPA Contract Laboratory Program Statement of Work for Organics Analysis, Multi-Media, Multi-Concentration." Document Number OLM04.2. May.
- EPA. 2000. "Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California." Title 40 Code of Federal Regulations Part 131, RIN 2040-AC44. May 18.
- EPA. 2001a. "Risk Assessment Guidance for Superfund, Volume I: Human Health Evaluation Manual (Part E, Supplemental Guidance for Dermal Risk Assessment)." Interim, Review Draft – for Public Comment. EPA/540/R-99/005. Office of Emergency and Remedial Response. September.
- EPA. 2001b. "Risk Assessment Guidance for Superfund: Volume I: Human Health Evaluation Manual (Part D, Standardized Planning, Reporting, and Review of Superfund Risk Assessments)." Final. December. Publication 9285-7-47.
- EPA. 2002a. "EPA Region IX Preliminary Remediation Goals (PRG) 2002." Region IX PRGs Table 2002 Update, Including Memorandum from Stanford Smucker,

EPA Region IX Regional Toxicologist, to PRG Table Users. October 1.
Available online at <http://www.epa.gov/region09/waste/sfund/prg/>.

- EPA. 2002b. "Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils (Subsurface Vapor Intrusion Guidance)." Draft. *Federal Register*: November 29, 2002, Volume 67, Number 230, pages 71169-71172. Also available on line at <http://www.epa.gov/correctiveaction/eis/vapor.htm>.
- EPA. 2002c. "National Recommended Water Quality Criteria: 2002." EPA-822-R-02-047. November.
- EPA. 2002d. "Revision of National Recommended Water Quality Criteria." FRL-OW-7431-3. December 27.
- EPA. 2002e. "Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites." OSWER 9285.6-10. Office of Emergency and Remedial Response. December.
- EPA. 2003. Integrated Risk Information System. On-line Database. Office of Research and Development, National Center for Environmental Assessment. May. <http://www.epa.gov/iris>.

APPENDIX C
PUBLIC NOTICE, ROSTER OF PUBLIC MEETING ATTENDEES, AND
PUBLIC MEETING TRANSCRIPT

**The Department of the Navy Announces a
Public Meeting and 30-Day Public Comment Period
On The Proposed Plan for Installation Restoration
Site 09, Former Foundry; and Site 10, Former Bus Painting Shop
Former Naval Station Treasure Island**

The Navy will hold a Public Meeting & invites public comment on the Proposed Plan (PP) for No Action for Installation Restoration (IR) Site 09, Former Foundry & IR Site 10, Former Bus Painting Shop at the former Naval Station Treasure Island (TI), San Francisco, California. The Navy issued the PP pursuant to the Comprehensive Environmental Response, Compensation, & Liability Act to ensure the public has an opportunity to comment on the proposed No Action for IR Sites 09 & 10.

TI is located in the San Francisco (SF) Bay region, just north of the SF-Oakland Bay Bridge. It resides within the City & County of SF. TI was built in 1936 & used initially for the Golden Gate International Expo in 1939. TI was leased to the Navy in 1941 & the Navy gained title in 1943. Naval operations were shut down in 1997. Reuse of the property is currently coordinated by the City of San Francisco.

Environmental data collected at IR Sites 09 & 10 between 1992 & 2002 were used to determine the extent of contamination & evaluate potential risks to human health & the environment. During these investigations, soil & groundwater samples were analyzed to determine the presence of contamination at each site. Investigation results were used to conduct a human health & ecological risk assessment that concluded soil & groundwater at IR Sites 09 & 10 did not pose an unacceptable risk to human health or the environment.

The Navy has issued a PP & is seeking public comment before making a final decision. The PP calls for No Action at IR Sites 09 & 10. Federal & state regulatory agencies concur with this PP.

30-Day Public Comment Period

The Navy will hold a **30-day public comment period through October 31, 2006**. During this time, comments on the PP will be accepted. Comments may be submitted in writing or orally at the public meeting, date & time listed below, or mail written comments **postmarked no later than October 31, 2006** to: BRAC PMO West, Attn: Mr. Scott Anderson, 1455 Frazee Road, Suite 900, San Diego, California 92108-4310, Or e-mail: scott.d.anderson@navy.mil

Public comments received during this period will be considered in the final decision-making process for IR Sites 09 & 10.

Public Meeting

The Navy will present its PP during a public meeting scheduled:

Date: Tuesday, October 17, 2006

Time: 6:00 p.m. - 7:00 p.m.

Location: Casa de la Vista, Building 271, TI

The Navy will provide displays & information on the investigations conducted for IR Sites 09 & 10. You will have an opportunity to ask questions & formally comment on the Navy's PP for No Action.

For More Information

The public is encouraged to review the PP document, as well as other site-related documents, at the Information Repositories located at:

San Francisco Public Library, Government Publications Section,
5th Floor, 100 Larkin Street, San Francisco CA 94102, (415) 557-4400, OR Navy BRAC CSO Detachment, 410 Palm Avenue, Bldg 1, Rm 161, TI, San Francisco, CA 94120, (415) 743-4704, M - F 9:30 am - 3:30pm

Or the PP can be viewed on the Navy's TI webpage at:

www.bracpmo.navy.mil/bracbases/california/treasure_island

Site 09/10 Proposed Plan Public Meeting October 17, 2006 Sign-in Sheet

Name	Address	How did you find out about this meeting?
Tommie Jean Damrel	Tetra Tech EM Inc 135 Main St Ste 1800 SF, CA 94105	Navy Consultant
KRISTINE YAGER	" "	Tetra Tech Navy Consultant
Scott Anderson	1455 Frazee Road Suite 900 San Diego, CA 92108	Navy
James W. [unclear]	" "	" "
David Risk - DTSC	700 Heing Ave. Suite 200 Dukeley, CA 94710	Navy
David Donohue	Tetra Tech EM Inc 7 West 6th Ave Suite 612 Helena, MT 59601	Navy Consultant
NATHAN BRENNAN	118 Caselli Ave SF CA 94111	RAB, CAB

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PROPOSED PLAN FOR
INSTALLATION RESTORATION
SITE 9, FORMER FOUNDRY,
AND SITE 10, FORMER BUS PAINTING SHOP
FORMER NAVAL STATION, TREASURE ISLAND

TREASURE ISLAND, CALIFORNIA
PUBLIC MEETING

Tuesday, October 17, 2006

Casa de la Vista (Building 271)
Treasure Island, California

Reported by: Valerie E. Jensen, CSR No. 4401

JAN BROWN & ASSOCIATES
CERTIFIED SHORTHAND REPORTERS
701 Battery Street, 3rd Floor
San Francisco, California 94111
(415) 981-3498

JAN BROWN & ASSOCIATES (800) 522-7096

1 P A R T I C I P A N T S

2 PRESENTER:

3 DAVID DONOHUE, Tetra Tech

4

5 OTHER AGENCY, NAVY STAFF AND CONSULTANT REPRESENTATIVES:

6

JAMES SULLIVAN, Navy BRAC Environmental Coordinator
for the Former Naval Station Treasure Island

7

DAVID RIST, Department of Toxic Substances Control

8

SCOTT ANDERSON, Navy

9

KRISTINE YAGER, Tetra Tech

10

MARCIE RASH, Tetra Tech

11

TOMMIE JEAN DAMREL, Tetra Tech

12

JIM WHITCOMB, Navy

13

PETE BOURGEOIS, Shaw E & I

14

PAM BAUR, Sullivan International

15

16 COMMUNITY MEMBERS AND INTERESTED PARTIES:

17

NATHAN BRENNAN, Restoration Advisory Board Member

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1 OCTOBER 17, 2006 6:22 P.M.

2

3 MR. SULLIVAN: Well, welcome to our
4 Proposed Plan Public Meeting for Sites 9 and 10.
5 I'm Jim Sullivan, the Navy BRAC Environmental
6 Coordinator for the Former Naval Station Treasure
7 Island.

8 And tonight we've reached another milestone
9 in the Navy's environmental program, the Proposed
10 Plan for Sites 9 and 10. We had completed a Remedial
11 Investigation for Sites 9 and 10, and we're now
12 proposing a no-action. So, consequently, we've gone
13 from the completion of the Remedial Investigation to
14 the Proposed Plan for no action. Had there been a need
15 for action, then we would have conducted a Feasibility
16 Study following the Remedial Investigation. But for
17 Sites 9 and 10 we're proposing a No-Action Proposed
18 Plan. And so tonight we're here to present that plan
19 and to take your comments.

20 And here tonight to present that is Dave
21 Donohue from Tetra Tech.

22 MR. DONOHUE: Thanks, Jim.

23 As Jim said, what we'd like to do in
24 the outline is kind of summarize what we have gone
25 through at Sites 9 and 10 here on Treasure Island,

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1 going through, in an abbreviated version, the
2 environmental programs, the site background that's
3 occurred out here with Sites 9 and 10, some of the
4 investigations that have taken place at the site,
5 some of the findings from the Human Health and
6 Ecological Risk Assessment, and then the conclusions
7 that have come out of the RI and then moving into the
8 Proposed Plan.

9 I think you're all aware of the environmental
10 programs that have happened here at Treasure Island,
11 starting back in 1980, through the CERCLA when it was
12 started in '81 with the Installation Restoration Program
13 and then the Federal Facility Site Remediation Agreement
14 that was in 1992.

15 The CERCLA process goes through a series
16 of investigations, first off, beginning with the
17 Preliminary Assessment/Site Investigation -- the
18 PA/SI -- into the RI, a Feasibility Study, which
19 helps to develop an evaluation of any remedial
20 alternatives if they're necessary, and then into
21 the Proposed Plan, which is where we're at today.
22 And then, following the Proposed Plan, public comment,
23 public input, we move into a Record of Decision.

24 Just briefly, the partners here at Treasure
25 Island include the Department of the Navy, DTSC and the

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1 Water Board, other Federal and state regulatory agencies
2 that might have been involved, including the EPA, Fish
3 and Wildlife Services. And then the other partners are
4 the public, the Restoration Advisory Board and the City
5 of San Francisco.

6 Treasure Island, as you're aware of, is
7 where we're at right now. It was built back in 1936
8 and '37. The Navy gained title for it in 1943. And
9 then the Navy operations were shut down in 1997. And
10 the reuse is currently being coordinated with the City
11 of San Francisco.

12 There are 33 (indicating) sites at Treasure
13 Island. Of those, Sites 9 and 10 are the ones that
14 we're talking about tonight. Those are two of the 33.
15 And they were evaluated to look at the potential risk to
16 human health and the environment from any contamination
17 associated with the sites.

18 The future site reuse. Based on the Draft
19 1996 Reuse Plan that was developed by the City and
20 County of San Francisco for Site 9, it's designated
21 as a film production/conference center. And Site 10
22 has a designated reuse as residential/open space/
23 publicly-oriented uses. That future reuse was used
24 to help scope the Risk Assessment and the approach
25 that we took for the investigation.

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1 The investigation history at the site.
2 It has gone through a series of Preliminary
3 Assessments/Site Inspections of Site 9. Site 10
4 did not have a PA/SI. It moved into the RI phase
5 because an adjacent site, Site 7, during the PA
6 phase, indicated there might be some potential similar
7 type of contamination at Site 10. So, it was carried
8 into the RI phase along with Site 9.

9 We've had a series of Environmental Baseline
10 Surveys. The additional RI was started in 2002, which
11 is kind of where I became involved in the project. And
12 then other studies throughout the investigations out at
13 Sites 9 and 10 included basewide groundwater monitoring,
14 hydrogeologic investigations, aquifer testing and the
15 tidal influence and metals.

16 Right now, as I mentioned, we've gone through
17 the first couple, the PA/SI, the RI. The FS was not
18 completed because, once we found out in the RI there
19 was no risk that required looking at any remedial
20 alternatives, we moved into the Proposed Plan and
21 the public comment period.

22 The history of Site 9. Basically, it
23 has had a series of multiple uses out at the site,
24 anywhere from -- originally, it was a forge and foundry.
25 It's also been a paint shop, vehicle storage, vehicle

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1 maintenance. Then last was a storage building for oil
2 spill containment.

3 It's a relatively-small area at Site 9.
4 It's approximately 11 thousand square feet. It
5 includes Building 41. As of today, the building,
6 as far as we know, is currently vacant.

7 The conceptual model we used. We built
8 off of the previous investigations for Site 9 and
9 looked at areas of contamination. There was a paint
10 booth within the building. There was an area of
11 contamination of -- elevated concentration of lead
12 in one of the previous samples and then a former
13 area of a tank that was here. So, those were the
14 areas we concentrated our investigations on.

15 We've gone through that.

16 Site 10 is a little larger, at 32 thousand
17 square feet. It includes the area around Building 335.
18 And it was a former bus painting shop, as well as a
19 paint-mixing facility and an area where pesticides
20 and chlorinated herbicides were mixed.

21 Currently, the building is used by a
22 landscaping contractor.

23 Our areas of investigation we were looking
24 at or the areas we were looking at for contamination
25 at Site 10 included this area of elevated concentration

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1 of pesticides in the soil and groundwater north of
2 the building, a former drain area inside the building,
3 an area of soils contamination to the south of the
4 building that was identified during aerial photos
5 and then an area of elevated PAH's -- polycyclic
6 aromatic hydrocarbons -- SVOCs, in the area to the
7 east of the building.

8 We've gone through the investigations and
9 through there.

10 As we mentioned, the purpose of the RI at
11 Sites 9 and 10 was to collect the data to adequately
12 characterize the site and to look at any alternatives
13 to be used in evaluating the alternatives. Along the
14 characterization of the sites, I would point out the
15 areas of -- that we -- that had sampling associated
16 with it. At Building 41, which is the main building
17 at Site 9, the locations of the samples that were
18 collected during previous investigations.

19 Being a geologist, I had to throw in a
20 cross-section.

21 This is the Site 9 geology that's developed
22 over the characterization for all those engineers
23 out there. Basically, we're looking at shallow fill
24 and shoal sands down in the lower part of the area.
25 The groundwater is approximately at about seven feet

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1 below ground surface at Site 9. And the groundwater
2 at Site 9 was of concern because it is flowing towards
3 the bay, moving at approximately 0.17 feet per year.

4 Site 9, nature and extent. I don't need to
5 go through all this. It was fairly well evaluated for
6 metals, pesticides, PCBs, SVOCs. Numerous samples for
7 groundwater were collected and analyzed for contaminants
8 that were identified as being of concern. The results
9 were, essentially, that no major sources of organic or
10 inorganic contamination were identified and that the
11 hydraulic lift and underground storage tank were
12 removed prior to any of the initial RI work.

13 There were elevated concentrations of
14 petroleum, TPHs, that were identified in a small
15 portion of (indicating) Site 9. That contamination
16 appeared to be localized and did not impact groundwater.

17 Moving over to Site 10 on the
18 characterization, again, just a snapshot of the
19 sample locations, the areas that were sampled out
20 at the site.

21 This is a cross-section of the geology at
22 Site 10. Again, we're looking at fill material on top
23 of a mixture of fill and shoal sands. And groundwater
24 at Site 10 is approximately seven feet below the surface
25 as well. Groundwater is moving in the direction to the

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1 north, northeast at Site 10 at a relatively-slow rate
2 as well.

3 At Site 10, again, there was a part of
4 the investigations. The areas that were looked at
5 were -- we investigated with soil borings, hydropunch,
6 monitoring wells. And sediment samples were collected
7 from the catch basins that were located on the south
8 side of the building as well. The results from
9 Site 10 indicated there were no major sources of any
10 organic or inorganic contamination at the site and
11 that the pesticide contamination that was located
12 north of Site 10, or north of Building 335, was likely
13 associated with sediment entrained in the groundwater
14 sample.

15 Just quickly, we'll go through the Human
16 Health Risk Assessments for the site. It was completed
17 following Navy, DTSC and EPA guidance. Two data sets
18 were looked at. Soil in the zero to two feet below
19 ground surface and the zero to eight feet bgs, as well
20 as groundwater data, were used in evaluating risk for
21 the site.

22 The contaminants identified in groundwater
23 and soil were screened against screening criteria
24 we have out at Treasure Island or EPA preliminary
25 remediation goals. No groundwater contaminants of

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1 potential concern -- or COPC -- were identified
2 at either of the sites, but the soil had several
3 contaminants at both the sites, including iron,
4 Benzo(a)pyrene and Dibenz(a,h)anthracene. Those
5 were both at zero to two feet and zero to eight feet
6 below ground surface.

7 The current and future reuse of the site
8 played a major factor in how Risk Assessment was
9 evaluated. The exposure that's part of the Human
10 Health Risk Assessment, the Exposure Assessment,
11 was completed where we looked at current and future
12 exposures at the site. They were both evaluated.
13 Each site was evaluated as its own exposure area.
14 Site 9 was relatively small -- 11 thousand square
15 feet, or 0.25 acres. And Site 10 was also about 32
16 thousand square feet, or 0.73. So, they both were
17 small enough to be evaluated as their own exposure
18 area. And the most likely future land use at both
19 sites can be summarized as commercial/industrial.

20 The Toxicity Assessment was completed, as
21 part of the Risk Assessment, in order to look at and
22 characterize cancer risks and the noncancer health
23 effects for the sites. Toxicity values were compiled
24 for each of the COPCs. The results of the Risk
25 Assessment found that -- we looked at the current

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1 industrial worker, future industrial worker, future
2 construction worker and future resident adults and
3 children scenarios that were evaluated as part of the
4 Risk Assessment. It was found the following scenarios
5 are within the risk management range of 10 to the
6 minus four to ten to the minus six or, essentially,
7 were considered to be insignificant risks at both
8 Sites 9 and 10.

9 There was also a Screening Level Ecological
10 Risk Assessment out there. At the time, Sites 9 and
11 10 were evaluated as being poor-quality habitat for
12 terrestrial receptors, so the terrestrial habitat wasn't
13 evaluated. But the potential impact from groundwater
14 discharging to the San Francisco Bay was evaluated as
15 part of the Screening Level Ecological Risk Assessment.

16 Again, groundwater was screened against
17 any TI screening criteria. The chemicals of
18 potential ecological concern, or COPECs, for Site 9
19 were identified as nickel, alpha-chlordane and
20 endosulfan pesticides. No COPECs were identified for
21 Site 10. The groundwater was all below the screening
22 criteria.

23 Then the fate and transport of those COPECs
24 identified at Site 9 were modeled in a analytical
25 groundwater model to see what potential impacts

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1 they might have on the receptors in the bay.

2 So, through the screening level eco risk,
3 we found the groundwater at Sites 9 and 10 didn't
4 pose an unacceptable risk to the aquatic biota.
5 So, as part of the RI, there was no additional soil
6 or -- the recommendations were no additional soil or
7 groundwater data were needed at Sites 9 and 10 and
8 that the current characterization was acceptable and
9 adequate to move it forward in the process.

10 Based on the Risk Assessments to both the
11 human health and the eco risk, there was no Remedial
12 Action required for soil or groundwater at the two
13 sites. The IRP effort for soil and groundwater was
14 to move it into a No-Action Record of Decision. And
15 that's where we're headed today.

16 One of the things that did come up through
17 the process of the RI, which I know you're all aware
18 of, is -- the final RI report was issued in March of
19 2005, but during the process of the draft and final
20 RI, there was -- during some investigations with some
21 Petroleum Investigation at Site 14/22 just south of
22 Site 10, there was some dioxin in the soil that was
23 discovered at that site in July of 2004. The dioxin
24 trenching was completed in November of 2005, and
25 the final dioxin trenching investigation report was

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1 completed in March of 2006.

2 But what happened was, during the
3 investigation, there was a two-inch layer of
4 heavy petroleum encountered below the surface that
5 was traced north towards Site 10. There was an
6 excavation down to one foot below the surface to
7 remove the soil, and confirmation samples were
8 collected from the excavation and found to be clean,
9 which received a concurrence from the Water Board
10 for no further action on the petroleum layer.

11 But a burnt layer was also found in
12 the northern portion of Site 14/22 during the
13 petroleum excavation that required additional
14 trenching, additional investigation for dioxins
15 and furans. There was -- the trenching extended
16 out to Site 10. There was a shallow soil trench.

17 I think I have a picture of it in here.

18 There was trenching, and then the
19 confirmation soil sampling was completed. It was found
20 all of the dioxins that were sampled and the results of
21 that were all below TI screening criteria, so there was
22 no further action in the trench there.

23 This is a picture of the trench area at
24 Site 10.

25 So, to the conclusions.

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1 Basically, the chemical levels that are at
2 Site 10 in the soils and groundwater don't pose an
3 unacceptable risk to human health or the environment.
4 And the soil excavations, as part of the Petroleum
5 Investigations that were just completed after the RI
6 was done, have completed (sic) the dioxin contamination
7 from the soils at Site 10. So, with this Proposed Plan,
8 the Navy is recommending there's no further action for
9 Sites 9 and 10 at Treasure Island. And the regulatory
10 agencies concur with this recommendation.

11 So, the Proposed Plan process moves on.
12 We've submitted the Proposed Plan and published a
13 notice in the local newspaper on September 29.

14 The Proposed Plan is available for review
15 in the information repository at Building 1 and in
16 the San Francisco Library. The public comment
17 period extends for 30 days -- but I think it might
18 have about 32 there -- from September 29 through
19 October 31. And then the public meeting is where
20 we're at right now.

21 We'll move into getting comments from the
22 public -- that's what we're looking for today -- up
23 until October 31. And then responses to any comments
24 will be completed and submitted as part of the Record
25 of Decision.

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1 Any questions?

2 MR. BRENNAN: One question.

3 On the terrestrial receptor habitat,
4 you said it's bad turf, so you didn't do that. How
5 different would that come out -- I mean, you run the
6 human health risk. How much different would it be for
7 a mouse?

8 MR. DONOHUE: When it was identified back
9 then, there was no terrestrial habitat. If there was
10 a terrestrial habitat, it would have been evaluated.
11 The site alone was not acceptable. It's asphalt and
12 concrete, essentially.

13 MR. ANDERSON: In addition, we were
14 conducting a Phase I basewide --

15 MR. BRENNAN: You're doing the basewide?

16 MR. ANDERSON: Right. It evaluates all the
17 sites as part of the -- it's a Basewide Screening Level
18 Risk Assessment. It's in draft now, I believe.

19 MR. BRENNAN: Okay. It's all asphalt.
20 Someday, it'll be different.

21 MR. DONOHUE: Okay. Thank you.

22 (Off the record at 6:45 p.m.)

23

24

25

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1 STATE OF CALIFORNIA) SS.

2

3 I do hereby certify that the hearing
4 was held at the time and place therein stated; that
5 the statements made were reported by me, a certified
6 shorthand reporter and disinterested person, and were,
7 under my supervision, thereafter transcribed into
8 typewriting.

9 And I further certify that I am
10 not of counsel or attorney for either or any of the
11 participants in said hearing nor in any way personally
12 interested or involved in the matters therein discussed.

13 IN WITNESS WHEREOF, I have hereunto set
14 my hand and affixed my seal of office this 10th day of
15 November 2006.

16

17

18

VALERIE E. JENSEN

19

Certified Shorthand Reporter

20

21

22

23

24

25

APPENDIX D
FINAL TECHNICAL MEMORANDUM, DIOXIN TRENCHING INVESTIGATION
(Selected Text)

APPENDIX D

FINAL TECHNICAL MEMORANDUM, DIOXIN TRENCHING INVESTIGATION, SITES 10, 14/22, AND 32, NAVAL STATION TREASURE ISLAND, SAN FRANCISCO, CALIFORNIA (Selected Text)

The Final Technical Memorandum, Dioxin Trenching Investigation, Sites 10, 14/22, and 32, Naval Station Treasure Island, San Francisco, California (Shaw 2006), documented the confirmation soil sampling conducted when excavation of dioxin-contaminated soils had been completed at Site 10, Former Bus Painting Shop, Naval Station Treasure Island. The report concludes that results for all post-excavation confirmation soil samples were less than the Treasure Island background value of 12 nanograms per kilogram, confirming that dioxin-contaminated soils are no longer present at the site.

The entire 300-page technical memorandum is available in the administrative record. The title page, table of contents, summary of analytical results for soil, and soil sampling location map from this technical memorandum are provided in this attachment.

REFERENCE

Shaw Environmental, Inc. 2006. "Final Technical Memorandum, Dioxin Trenching Investigation, Sites 10, 14/22, and 32, Naval Station Treasure Island, San Francisco, California." March 20.



**DEPARTMENT OF THE NAVY
BASE REALIGNMENT AND CLOSURE
PROGRAM MANAGEMENT OFFICE WEST
1435 FRAZEE RD, SUITE 909
SAN DIEGO, CA 92161-4310**

**5090
Ser BPMOW.SA/0247
March 20, 2006**

**From: Commander, Southwest Division, Naval Facilities Engineering Command
To: Distribution**

**Subj: FINAL TECHNICAL MEMORANDUM, DIOXIN TRENCHING INVESTIGATION, SITES
10, 14/22, AND 32, NAVAL STATION TREASURE ISLAND, SAN FRANCISCO,
CALIFORNIA**

**Encl: (1) Final Technical Memorandum, Dioxin Trenching Investigation, Sites 10, 14/22,
and 32, Naval Station Treasure Island, San Francisco, California, of March 20,
2005**

**1. Enclosure (1) the Final Technical Memorandum, Dioxin Trenching Investigation, Sites 10,
14/22, and 32, Naval Station Treasure Island is provided for your files. Thank you very
much for your assistance on this project.**

**2. For further information, please contact Mr. Scott Anderson at (619) 532-0938 or me at
(619) 532-0966.**

**JAMES B. SULLIVAN
BRAC Environmental Coordinator
By direction**

Distribution:

**Ms. Patti Collins, U.S. Environmental Protection Agency, Region IX
Mr. David Rist, California Department of Toxic Substances Control
Mr. Alan Friedman, California Regional Water Quality Control Board
Mr. Marc McDonald, Treasure Island Development Authority
Ms. Jill Bensen, CH2M Hill
Mr. Gary Foote, Geomatrix Consultants
Ms. Marcie Rash, Tetra Tech EM Inc.
Mr. John Baur, Shaw Environmental & Infrastructure**

5090
Ser BPMOW.SA/0247
March 20, 2006

Community RAB Members:
Mr. Nathan Brennan
Ms. Dale Smith
Mr. Douglas Ryan
Mr. Woody Baker-Cohn
Mr. Saul Bloom, ARC Ecology

FINAL

TECHNICAL MEMORANDUM

***Dioxin Trenching Investigation, Sites 10, 14/22, and 32
Naval Station Treasure Island
San Francisco, California***

***Environmental Remedial Action
Contract Number N62474-98-D-2076
Contract Task Order 0106***

***Document Control Number 9913
Revision 0***

March 20, 2006

Submitted to:

Base Realignment and Closure
Program Management Office West
1455 Frazee Road, Suite 900
San Diego, California 92108-4310

Submitted by:

Shaw Environmental, Inc.
4005 Port Chicago Highway
Concord, California 94520-1120

FINAL

TECHNICAL MEMORANDUM

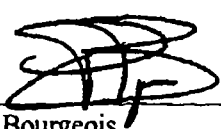
***Dioxin Trenching Investigation, Sites 10, 14/22, and 32
Naval Station Treasure Island
San Francisco, California***

***Environmental Remedial Action
Contract Number N62474-98-D-2076
Contract Task Order 0106***

***Document Control Number 9913
Revision 0***

March 20, 2006

Approved by: _____


Peter Bourgeois
Shaw Project Manager

Date: March 20, 2006

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3.3 Soil Analytical Results

The soil samples collected at Site 10 were analyzed for dioxins only and the results were used to calculate the TCDDeqs for each sample, as described in Section 2.4. The TCDDeq results are shown on Figure 3, "Soil Sample Locations and Analytical Results, Sites 10 and 14/22," and presented in Table 1, "Soil Analytical Results for Dioxins as TCDDeq, Sites 10 and 14/22," and Appendix H contains the complete analytical results.

Dioxins were detected in all samples at concentrations ranging from 0.022 ng/kg to 10.6 ng/kg, with the following breakdown by soil type:

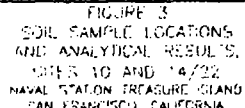
- Native sand in trench floor and walls, from 0.092 to 0.70 ng/kg
- Macadam layer consisting of cohesive dark brown sand, from 0.042 to 1.9 ng/kg (the highest detection was from an area of macadam that included small charcoal fragments)
- Fill soil, grayish brown silty sand with gravel, from 0.022 to 10.6 ng/kg (the highest occurrence was in a sample that included thin charcoal stringers)

All results were less than the TI background value of 12 ng/kg, confirming that dioxins-impacted soil is no longer present at Site 10 and no further exploratory trenching was necessary. The Navy presented these data to DTSC and received agreement that no further trenching or soil sampling was required. The trench was then backfilled with clean soil.

Table 1

Soil Analytical Results for Dioxins as TCDDeq, Sites 10 and 14/22

Location ID	Sample ID	Sample Depth, ft bgs	Description	TCDDeq (0) ng/kg	TCDDeq (1/2 RL) ng/kg
SITE 10					
L001	S10-L001-0.4	1.6	Native Sand	0.16	0.19
L002	S10-L002-0.5	1.6	Native Sand	0.16	0.20
L003	S10-L003-0.6	2.4	Native Sand	0.092	0.13
L004	S10-L004-1.2	1.2	Fill Soil w/charcoal	10.6	10.6
L005	S10-L005-1.4	1.4	Macadam w/ charcoal	1.8	1.9
L006	S10-L006-1.1	1.1	Native Sand	0.47	0.51
L007	S10-L007-1.7	1.7	Fill Soil	0.022	0.11
L008	S10-L008-0.5	0.5	Native Sand	0.70	0.70
L009	S10-L009-0.7	0.7	Macadam layer	0.042	0.095
L010	S10-L010-0.5	0.5	Fill Soil	6.5	6.5
SITE 14/22					
T001	S14/22-T001-1.8	1.8	Native Sand	0.023	0.056
T002	S14/22-T002-2.0	2.0	Native Sand	0.029	0.058



APPENDIX E
PUBLIC COMMENTS

APPENDIX E

PUBLIC COMMENTS

The proposed plan for Sites 09 and 10 was made available to the public on September 29, 2006, thereby initiating the 30-day public comment period. The public meeting for the proposed plan for Sites 09 and 10 was held on October 17, 2006, in the Casa de la Vista, Building 271, at Treasure Island, California. No comments from the public or supporting agencies were submitted at the public meeting, and none were received by U.S. mail during the 30-day public comment period. Therefore, the Navy has concluded that no stakeholder issues are identified, and there is no need for a written response or a separate point-by-point response document.



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05 OCT 2007

Mr. Henry Wong,
California Department of Toxic Substances Control
Office of Military Facilities
700 Heinz Avenue, Suite 200
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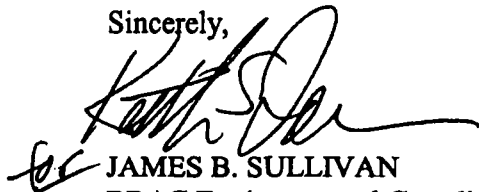
Dear Mr. Wong:

**SUBJECT: TRANSMITTAL OF THE RECORD OF DECISION (ROD) FOR
INSTALLATION RESORATION (IR) SITE 9 – FORMER FOUNDRY, AND
SITE 10 – FORMER BUS PAINTING SHOP, AT NAVAL STATION
TREASURE ISLAND, SAN FRANCISCO, CA**

Enclosure (1) the Record of Decision for IR Site 9 – Former Foundry, and Site 10 – Former Bus Painting Shop, at Naval Station Treasure Island, San Francisco, CA dated September, 2007 is provided for your files. The Navy appreciates all the assistance that we have received on this project.

Thank you for your continued support of this program. Should you have any questions or need additional information, please contact Mr. Scott Anderson, Project Manager at (619) 532-0938 or Mr. Charles Perry, Lead Project Manager, at (619) 532-0911.

Sincerely,


JAMES B. SULLIVAN
BRAC Environmental Coordinator
By direction of the Director

Enclosure: 1. Record of Decision for IR Site 9 – Former Foundry, and Site 10 – Former Bus Painting Shop, at Naval Station Treasure Island, San Francisco, CA

5090

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05 OCT 2007

Distribution:

Ms. Christine Katin, U.S. Environmental Protection Agency, Region IX
Ms. Agnes Farres, California Regional Water Quality Control Board
Mr. Gary Foote, Geomatrix Consultants
Ms. Mirian Saez, Treasure Island Development Authority (w/out enclosure)
Mr. Jack Sylvan, Mayor's Office of Base Reuse and Development (w/out enclosure)
Mr. Jeff Austin, Lennar Communities
Mr. Randy Brandt, LFR, Inc.
Ms. Marcie Rash, Tetra Tech EM Inc.
Ms. Laura Newman, Tetra Tech HI
Ms. Betsy Couch, Tetra Tech SD
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Mr. Nathan Brennan
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Mr. Douglas Ryan
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